
CIRCULATION

A Journal of the American Heart Association

VOLUME X
July-December, 1954



GRUNE & STRATTON, INC.
NEW YORK AND LONDON

General

EDITOR-IN-CHIEF

THOMAS M. McMILLAN
Philadelphia, Pa.

EDITORIAL BOARD

| | |
|--|---|
| E. COWLES ANDRUS, <i>Baltimore, Md.</i> | H. M. MARVIN, <i>New Haven, Conn.</i> |
| BENJAMIN M. BAKER, <i>Baltimore, Md.</i> | DAVID F. OPDYKE, <i>Rahway, N. J.</i> |
| GEORGE E. BURCH, <i>New Orleans, La.</i> | GEORGE A. PERERA, <i>New York, N. Y.</i> |
| HOWARD B. BURCHELL, <i>Rochester, Minn.</i> | DAVID D. RUTSTEIN, <i>Boston, Mass.</i> |
| J. SCOTT BUTTERWORTH, <i>New York, N. Y.</i> | ROY W. SCOTT, <i>Cleveland, Ohio</i> |
| CLARENCE E. DE LA CHAPELLE, <i>New York, N. Y.</i> | EPHRAIM SHORR, <i>New York, N. Y.</i> |
| ANDRÉ Cournand, <i>New York, N. Y.</i> | HOWARD B. SPRAGUE, <i>Boston, Mass.</i> |
| THADDEUS S. DANOWSKI, <i>Pittsburgh, Pa.</i> | HELEN B. TAUSSIG, <i>Baltimore, Md.</i> |
| CHARLES T. DOTTER, <i>Portland, Ore.</i> | C. J. VAN SLYKE, <i>Bethesda, Md.</i> |
| J. RUSSELL ELKINTON, <i>Philadelphia, Pa.</i> | GEORGE E. WAKERLIN, <i>Chicago, Ill.</i> |
| HAROLD D. GREEN, <i>Winston-Salem, N. C.</i> | JAMES V. WARREN, <i>Durham, N. C.</i> |
| DWIGHT E. HARKEN, <i>Boston, Mass.</i> | PAUL D. WHITE, <i>Boston, Mass.</i> |
| HANS H. HECHT, <i>Salt Lake City, Utah</i> | CHARLES C. WOLFERTH, <i>Philadelphia, Pa.</i> |
| EDGAR A. HINES, JR., <i>Rochester, Minn.</i> | HAROLD G. WOLFF, <i>New York, N. Y.</i> |
| FRANKLIN D. JOHNSTON, <i>Ann Arbor, Mich.</i> | IRVING S. WRIGHT, <i>New York, N. Y.</i> |

ASSOCIATE EDITORS

| | | |
|---|---|---|
| EDGAR V. ALLEN <i>Rochester, Minn.</i> | SAMUEL BELLET <i>Philadelphia, Pa.</i> | HERRMAN L. BLUMGART <i>Boston, Mass.</i> |
|---|---|---|

PUBLICATIONS COMMITTEE OF THE SCIENTIFIC COUNCIL AMERICAN HEART ASSOCIATION

| | |
|---|---|
| IRVING S. WRIGHT, <i>Chairman</i> <i>New York, N. Y.</i> | H. M. MARVIN, <i>Vice Chairman</i> <i>New Haven, Conn.</i> |
|---|---|

| | | | |
|--|--|--|---|
| J. SCOTT BUTTERWORTH <i>New York, N. Y.</i> | CHARLES A. R. CONNOR <i>New York, N. Y.</i> | IRVING B. HEXTER <i>Cleveland, Ohio</i> | CHARLES D. MARPLE <i>New York, N. Y.</i> |
|--|--|--|---|

| | | |
|---|--|---|
| BENEDICT F. MASSELL <i>Boston, Mass.</i> | THOMAS M. McMILLAN <i>Philadelphia, Pa.</i> | CARL J. WIGGERS <i>Cleveland, Ohio</i> |
|---|--|---|

Spanish Summaries by REMY RODRIGUEZ, M.D., *Ponce, Puerto Rico*

QP

101

FSO

V.10

July-Dec

1954

VOLUME X

22

July-December, 1954

CIRCULATION

A Journal of the American Heart Association

No. 1

| | |
|--|-----|
| THE LEWIS A. CONNER MEMORIAL LECTURE: ATHEROSCLEROSIS. AN INTRODUCTION <i>Irvine H. Page</i> | 1 |
| DEVELOPMENT OF HYPERTENSIVE MANIFESTATIONS AFTER THE DISAPPEARANCE OF HYPERTENSION..... <i>George A. Perera</i> | 28 |
| SERUM LIPOPROTEIN STABILITY IN ATHEROSCLEROSIS..... <i>Louis Horlick</i> | 30 |
| THE DIFFUSE VASCULAR LESION OF SO-CALLED "THROMBOTIC THROMBOCYTOPENIC PURPURA"..... <i>Harold W. March</i> | 43 |
| THERAPY OF GRAM POSITIVE BACTEREMIAS WITH PRESENTATION OF FOUR CASES <i>Richard R. Beckwith, Edwin M. Goyette, W. S. Spicer, and C. D. Graber</i> | 56 |
| THE EFFECT OF DIPHENYLHYDANTOIN SODIUM (DILANTIN), PROCAINE HYDRO- CHLORIDE, PROCAINE AMIDE HYDROCHLORIDE, AND QUINIDINE HYDROCHLORIDE UPON OUABAIN-INDUCED VENTRICULAR TACHYCARDIA IN UNANESTHETIZED DOGS..... <i>Lois Mosey and Myra D. Tyler</i> | 65 |
| THE VALUE OF THE ATRIAL ELECTROKYMোগRAM IN THE DIAGNOSIS OF MITRAL RE- GURGITATION. OBSERVATIONS ON PATIENTS WITH RHEUMATIC MITRAL STENOSIS BEFORE AND AFTER MITRAL VALVULOPLASTY <i>Felix G. Fleischner, Walter H. Abelman, and Robert Buka</i> | 71 |
| LACK OF CORRELATION BETWEEN RALES AND ARTERIAL OXYGEN SATURATION IN PATIENTS WITH PULMONARY CONGESTION AND EDEMA <i>Albert Vitale, Paul R. Dumke, and J. H. Comroe, Jr.</i> | 81 |
| VENTRICULAR FUNCTION. V. THE CIRCULATORY EFFECTS OF ARAMINE; MECHANISM OF ACTION OF "VASOPRESSOR" DRUGS IN CARDIOGENIC SHOCK <i>Stanley J. Sarnoff, Robert B. Case, Erik Berglund, and L. Charlotte Sarnoff</i> | 84 |
| SERUM LIPID AND PROTEIN FRACTIONS. IX. COMPARISONS OF NINETY-SIX PATIENTS WITH VASCULAR DISEASE AND SIXTY NORMAL CONTROLS (WITH ADDITIONAL NOTES ON BLOOD DONORS)..... <i>Irving Leinwand and Dan H. Moore</i> | 94 |
| A DIRECT EXPERIMENTAL STUDY OF THREE SYSTEMS OF SPATIAL VECTORCARDIOG- RAPHY..... <i>Ernest Frank</i> | 101 |
| CLINICAL PROGRESS. THE HEART IN RENAL DISEASE..... <i>Harry A. Derow</i> | 114 |
| CLINICAL CONFERENCES. AN UNUSUAL CASE OF JOINT PAINS AND FEVER. BERYL- LIOSIS AND PULMONARY HYPERTENSION MISTAKEN FOR RHEUMATIC FEVER <i>Howard B. Sprague and Harriet L. Hardy</i> | 129 |
| ABSTRACTS..... | 133 |
| AMERICAN HEART ASSOCIATION..... | 151 |

No. 2

| | |
|--|-----|
| ISOLATED VALVULAR PULMONIC STENOSIS. CLINICAL AND PHYSIOLOGIC RESPONSE TO OPEN VALVULOPLASTY <i>S. Gilbert Blount, Jr., Malcolm C. McCord, Helmut Mueller, and Henry Swan</i> | 161 |
| ANTIBIOTIC THERAPY OF BACTERIAL ENDOCARDITIS. VI. SUBACUTE ENTEROCOCCAL ENDOCARDITIS: CLINICAL, PATHOLOGIC AND THERAPEUTIC CONSIDERATION OF 33 CASES..... <i>Joseph E. Geraci and William J. Martin</i> | 173 |
| THE DYNAMICS OF THE HEART IN COMPLETE A-V BLOCK. AN ANGIOCARDIOGRAPHIC STUDY..... <i>John Lind, Carl Wegelius, and Henrik Lichtenstein</i> | 195 |
| LOWERING OF SERUM CHOLESTEROL BY THE ADMINISTRATION OF A PLANT STEROL <i>Maurice M. Best, Charles H. Duncan, Edward J. Van Loon, and Joan D. Wathen</i> | 201 |
| THE CLINICAL DETERMINATION OF MITRAL INSUFFICIENCY WHEN ASSOCIATED WITH MITRAL STENOSIS..... <i>O. Henry Janton, Guenther Heidorn, Louis A. Soloff, Thomas J. E. O'Neill, and Robert P. Glover</i> | 207 |
| ANTICOAGULANT THERAPY WITH DICUMAROL MAINTAINED DURING MAJOR SURGERY <i>Sten Müllertz and Ole Storm</i> | 213 |
| ATRIAL RUPTURE OF THE HEART. REPORT OF CASE FOLLOWING ATRIAL INFARCTION AND SUMMARY OF 79 CASES COLLECTED FROM THE LITERATURE <i>Robert M. Kohn, Raymond Harris, and L. Whittington Gorham</i> | 221 |
| PERSISTENT SUPRAVENTRICULAR TACHYCARDIA. CASE REPORT WITH REVIEW OF LITERATURE..... <i>Norman Shachnov, Stanley Spellman, and Ira Rubin</i> | 232 |
| EFFECTS OF CORTISONE, HYDROCORTISONE AND CORTICOTROPIN ON LIPEMIA, GLYCEMIA AND ATHEROGENESIS IN CHOLESTEROL-FED CHICKS <i>Jeremiah Stamler, Ruth Pick, and Louis N. Katz</i> | 237 |
| ESTROGEN PROPHYLAXIS OF CHOLESTEROL-INDUCED CORONARY ATHEROGENESIS IN CHICKS GIVEN ADRENAL CORTICOIDS OR ACTH <i>Jeremiah Stamler, Ruth Pick, and Louis N. Katz</i> | 247 |
| INHIBITION OF CHOLESTEROL-INDUCED CORONARY ATHEROGENESIS IN THE EGG-PRODUCING HEN..... <i>Jeremiah Stamler, Ruth Pick, and Louis N. Katz</i> | 251 |
| PROLONGED OBSERVATIONS OF THE CARDIOVASCULAR STATUS IN ESSENTIAL HYPERLIPEMIA: WITH SPECIAL REFERENCE TO SERUM LIPID RESPONSE TO HEPARIN <i>Alfred Soffer and Martin Murray</i> | 255 |
| A COMPARISON OF THE CEREBRAL HEMODYNAMIC RESPONSE TO ARAMINE AND NOREPINEPHRINE IN THE NORMOTENSIVE AND THE HYPOTENSIVE SUBJECT <i>John H. Moyer, George Morris, and Harvey Snyder</i> | 265 |
| THE RELATION BETWEEN BLOOD ORGANIC ACID SOLUBLE PHOSPHATE FRACTIONS, CITRIC ACID, PROTEIN FRACTIONS, AND LIPID FRACTIONS IN ATHEROSCLEROTIC HEART DISEASES AND IN LIPEMIAS <i>Sidney P. Gottfried, Nathan H. Friedman, Irving B. Akerson, Russell H. Pope, and Salvatore Di Mauro</i> | 271 |
| CLINICAL METHOD OF PHOTOGRAPHING THE SMALLER BLOOD VESSELS AND THE CIRCULATING BLOOD IN THE BULBAR CONJUNCTIVA OF HUMAN SUBJECTS <i>Jørn Ditzel, and Richard W. St. Clair</i> | 277 |
| CLINICAL PROGRESS. SYNDROME OF SHORT P-R INTERVAL WITH ABNORMAL QRS COMPLEXES AND PAROXYSMAL TACHYCARDIA (WOLFF-PARKINSON-WHITE SYNDROME)..... <i>Louis Wolff</i> | 282 |
| ABSTRACTS..... | 292 |
| AMERICAN HEART ASSOCIATION..... | 308 |

CONTENTS OF VOLUME X

v

No. 3

| | |
|---|---|
| STUDIES ON THE CONTROL OF HYPERTENSION BY HYPHEX. V. EFFECTS ON THE COURSE OF THE MALIGNANT STAGE | |
| Henry A. Schroeder, John D. Morrow, and H. Mitchell Perry, Jr. | 331 |
| INTRAVENOUS TRYPSIN | Alexander Taylor and Irving S. Wright 331 |
| THE EFFECT OF INTRAVENOUS TRYPSIN ADMINISTRATION ON THE ELECTROCARDIOGRAM OF THE RABBIT | |
| Jerrold S. Lieberman, Alexander Taylor, and Irving S. Wright | 338 |
| PULMONARY ARTERIOSCLEROSIS AND COR PULMONALE DUE TO RECURRENT THROMBOEMBOLISM | P. J. Barnard 343 |
| HYPERVENTILATION IN POSTURAL HYPOTENSION | |
| John F. Burnum, John B. Hickam, and Eugene A. Stead, Jr. | 362 |
| EFFECTS OF AN ADRENERGIC BLOCKING AGENT (DIBENZYLINE) UPON CLINICAL MANIFESTATIONS OF ARTERIAL INSUFFICIENCY IN THE EXTREMITIES | |
| Lothar Wertheimer, Walter Redisch, and J. Murray Steele | 366 |
| CLINICAL TRIAL OF ILIDAR, A NEW DIBENZAZEPINE ADRENERGIC BLOCKING DRUG, IN THE TREATMENT OF PERIPHERAL VASCULAR DISEASES AND MISCELLANEOUS COMPLAINTS | Harold D. Green and Hugh H. DuBose 374 |
| ANALYSIS OF THE ELECTROCARDIOGRAMS OBTAINED FROM 1000 YOUNG, HEALTHY AVIATORS: TEN YEAR FOLLOW-UP | |
| John M. Packard, John S. Graettinger, and Ashton Graybiel | 384 |
| ELECTROCARDIOGRAPHY IN THE SELECTION OF ROYAL CANADIAN AIR FORCE AIRCREW | G. W. Manning 401 |
| POSTURAL HYPOTENSION INDUCED BY ATROPINE SULFATE | |
| Martin H. Kalser, Charles W. Frye, and Archer S. Gordon | 413 |
| MEASUREMENT OF ATROPINE-INDUCED VASCULAR POOLING | |
| Robert D. Miller, Martin H. Kalser, Charles W. Frye, and Archer S. Gordon | 423 |
| CLINICAL CONFERENCES. THE CORRECTION OF ELECTROLYTE DEFICITS IN CARDIOVASCULAR-RENAL DISEASE | F. R. Schemm, and A. A. Cámara 430 |
| CLINICAL PROGRESS. CLINICAL STUDY AND TREATMENT OF VARICOSE VEINS | |
| Hugh Montgomery and Harold A. Zintel | 442 |
| ABSTRACTS | 451 |
| AMERICAN HEART ASSOCIATION | 475 |

No. 4

| | |
|---|---|
| COMPARISON OF INDIRECT AND DIRECT METHODS OF MEASURING ARTERIAL BLOOD PRESSURE | Frederick H. Van Bergen, D. Stuart Weatherhead, Alan E. Treloar, Allan B. Dobkin, and Joseph J. Buckley 481 |
| OBSERVATIONS CONCERNING THE PRODUCTION AND EXCRETION OF CHOLESTEROL IN MAMMALS. XIV. THE RELATIONSHIP OF THE HEPATIC RETICULOENDOTHELIAL CELL (KUPFFER CELL) TO ENDOGENOUSLY PRODUCED CHOLESTEROL | Meyer Friedman and Sanford O. Byers 491 |
| PHONOCARDIOGRAPHY IN PATENT DUCTUS ARTERIOSUS | |
| Olga M. Haring, Aldo A. Luisada, and Benjamin M. Gasul | 501 |
| LIVER FUNCTION AND HYPERTENSION. BLOOD PRESSURE AND HEART WEIGHT IN CHRONIC HEPATITIS | Flemming Raaschou 511 |
| PREVENTION OF SYSTEMIC ARTERIAL EMBOLISM IN CHRONIC RHEUMATIC HEART DISEASE BY MEANS OF PROTRACTED ANTICOAGULANT THERAPY | |
| John C. Wood and Hadley L. Conn, Jr. | 517 |

| | |
|--|-----|
| BACTERIAL ENDOCARDITIS AND MURAL THROMBI IN THE HEART <i>Jacques B. Wallach, Macellis Glass, Leslie Lukash, and Alfred A. Angrist</i> | 524 |
| OBSERVATIONS ON THE INTERATRIAL PRESSURE GRADIENTS IN MAN <i>A. B. Shaffer, E. N. Silber, and L. N. Katz</i> | 527 |
| SODIUM OUTPUT-BLOOD PRESSURE RELATIONSHIPS AND THEIR MODIFICATION BY TREATMENT..... <i>D. M. Green and Eugene J. Ellis</i> | 536 |
| A THEORETIC ANALYSIS OF THE EFFECTS OF DIPOLE ECCENTRICITY UPON THE MANIFEST VECTORS, THE MANIFEST QRS LOOPS AND THE POTENTIAL OF THE CENTRAL TERMINAL..... <i>Manuel Gardberg</i> | 544 |
| REPORT OF COMMITTEE ON ELECTROCARDIOGRAPHY, AMERICAN HEART ASSOCIATION. RECOMMENDATIONS FOR STANDARDIZATION OF ELECTROCARDIOGRAPHIC AND VECTORCARDIOGRAPHIC LEADS <i>Frank N. Wilson, Honorary Chairman, Charles E. Kossmann, Chairman, George E. Burch, Emanuel Goldberger, Ashton Graybiel, Hans H. Hecht, Franklin D. Johnston, Eugene Lepeschkin, and Gordon B. Myers</i> | 564 |
| CLINICAL PROGRESS. UNUSUAL FORMS OF HEART DISEASE.... <i>Howard B. Burchell</i> | 574 |
| PROGRAM AND PROCEEDINGS OF THE EIGHTH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR THE STUDY OF ARTERIOSCLEROSIS..... | 580 |
| ABSTRACTS..... | 616 |
| AMERICAN HEART ASSOCIATION..... | 638 |

No. 5

| | |
|---|-----|
| CHEMICAL QUANTITATION OF EPINEPHRINE AND NOREPINEPHRINE IN THIRTEEN PATIENTS WITH PHEOCHROMOCYTOMA..... <i>William M. Manger, Eunice V. Flock, Joseph Berkson, Jesse L. Bollman, Grace M. Roth, Edward J. Baldes, and Martin Jacobs</i> | 641 |
| HEMODYNAMIC STUDIES IN SICKLE CELL ANEMIA..... <i>Leonard Leight, Thomas H. Snider, George O. Clifford, and Harper K. Hellem</i> | 653 |
| THE SIXTY-NINTH MARY SCOTT NEWBOLD LECTURE. THE MECHANISM OF CARDIAC FAILURE..... <i>Louis N. Katz</i> | 663 |
| MARCUMAR [3-(1'-PHENYL-PROPYL)-4-HYDROXYCOUMARIN]. A NEW ANTICOAGULANT <i>René Bourgain, Margaret Todd, Lorraine Herzig, and Irving S. Wright</i> | 680 |
| CLINICAL EXPERIENCE WITH DIPAXIN AND WITH THE COMBINED USE OF PROTHROMBOPENIC AGENTS <i>Ricardo Katz, Héctor Ducci, Werner Roeschmann, and Lucia Toriello</i> | 685 |
| THE CONTROL OF DICUMAROL THERAPY IN MYOCARDIAL INFARCTION BY A SIMPLE BLOOD PROTHROMBIN TEST..... <i>Benjamin Manchester and Boris Rabkin</i> | 691 |
| PATTERN OF HEREDITARY SUSCEPTIBILITY IN RHEUMATIC FEVER <i>May G. Wilson and Morton Schweitzer</i> | 699 |
| THE PRESENCE OF VENOARTERIAL SHUNTS IN PATIENTS WITH INTERATRIAL COMMUNICATIONS..... <i>H. J. C. Swan, Howard B. Burchell, and Earl H. Wood</i> | 705 |
| THE EFFECT OF ORAL IODIDE ON SERUM BUTANOL-INSOLUBLE PROTEIN-BOUND IODINE IN VARIOUS SPECIES..... <i>Helen B. Brown and Irvine H. Page</i> | 714 |
| PROSTIGMINE INHIBITION OF VENTRICULAR FIBRILLATION IN THE HYPOTHERMIC DOG..... <i>A. V. Montgomery, Arthur E. Prevedel, and Henry Swan</i> | 721 |
| THE SPATIAL VECTORCARDIOGRAM IN LEFT VENTRICULAR HYPERTROPHY <i>L. G. Horan, G. E. Burch, J. A. Abildskov, and J. A. Cronwich</i> | 728 |
| CHANGES OF VENTRICULAR IMPULSE FORMATION DURING CAROTID PRESSURE IN MAN <i>M. Golbey, C. P. Ladopoulos, F. H. Roth, and D. Scherf</i> | 735 |

| | | |
|--|---|-----|
| SERUM LIPID AND FAT TOLERANCE STUDIES IN NORMAL, OBESE AND ATHEROSCLEROTIC SUBJECTS..... | <i>Julius Pomeranze, William H. Beinfield, and Max Chessin</i> | 742 |
| CLINICAL PROGRESS. MYOCARDITIS | | |
| | <i>Clarence E. de la Chapelle and Charles E. Kossmann</i> | 747 |
| CLINICAL CONFERENCES. MYXOMA OF THE LEFT ATRIUM SIMULATING MITRAL STENOSIS | | |
| | <i>John W. Harrison, Lawrence J. McCormack, and A. Carlton Ernstene</i> | 766 |
| ABSTRACTS..... | | 772 |
| BOOKS RECEIVED..... | | 796 |
| BOOK REVIEWS..... | | 797 |
| AMERICAN HEART ASSOCIATION..... | | 799 |

No. 6

| | | |
|---|---|-----|
| PATHOLOGY OF THE PULMONARY VASCULAR TREE. IV. STRUCTURAL CHANGES IN THE PULMONARY VESSELS IN CHRONIC LEFT VENTRICULAR FAILURE | | |
| | <i>Roger C. Smith, Howard B. Burchell, and Jesse E. Edwards</i> | 801 |
| TREATMENT OF ANGINA PECTORIS WITH CINCHONA ALKALOIDS | | |
| | <i>Joseph E. F. Riseman, Lester A. Steinberg, and George E. Altman</i> | 809 |
| TRAUMATIC AORTIC ANEURYSMS | | |
| | <i>Edwin M. Goyette, Hu A. Blake, James H. Forsee, and Henry Swan</i> | 824 |
| "ISOLATED" T-WAVE NEGATIVITY IN THE "ISCHEMIC PHASE" OF MYOCARDIAL INFARCTION IN MAN..... | <i>Robert C. Schlant, Harold D. Levine, and C. Cabell Bailey</i> | 829 |
| THE MISINTERPRETATION OF ELECTROCARDIOGRAMS WITH POSTPRANDIAL T-WAVE INVERSION..... | <i>Isidore Rochlin and W. L. Jack Edwards</i> | 843 |
| REPEAT VARIABILITY OF SPATIAL QRS AND T VECTORS | <i>Ernst Simonson and Ancel Keys</i> | 850 |
| ELECTROCARDIOGRAPHIC FINDINGS IN EPIDEMIC HEMORRHAGIC FEVER | <i>Carl M. Pearson and Robert J. Hall</i> | 855 |
| POSTOPERATIVE CHANGES IN THE ELECTROCARDIOGRAM IN CONGENITAL HEART DISEASE. I. PURE PULMONARY STENOSIS..... | <i>Bernhard Landtman</i> | 859 |
| POSTOPERATIVE CHANGES IN THE ELECTROCARDIOGRAM IN CONGENITAL HEART DISEASE. II. COARCTATION OF THE AORTA AND PATENT DUCTUS ARTERIOSUS | <i>Bernhard Landtman</i> | 871 |
| STUDIES ON TOLERANCE TO GANGLIONIC BLOCKING AGENTS IN MAN. REVERSAL OF DEPRESSOR ACTION OF QUARTERNARY AMMONIUM COMPOUNDS | <i>A. S. Dontas and S. W. Hoobler</i> | 887 |
| ESTROGEN INHIBITION OF CORTICOID HYPERTENSION IN CHICKENS..... | <i>J. Stamler</i> | 896 |
| THE EFFECT OF CONGESTIVE HEART FAILURE ON BLOOD VOLUME AS DETERMINED BY RADIOCHROMIUM-TAGGED RED CELLS..... | <i>Seymour Eisenberg</i> | 902 |
| THE EFFECT OF ACUTE SALT LOADS ON THE URINARY SODIUM OUTPUT OF NORMOTENSIVE AND HYPERTENSIVE PATIENTS BEFORE AND AFTER SURGERY | <i>Jesse E. Thompson, Thomas F. Silva, Dera Kinsey, and Reginald H. Smithwick</i> | 912 |
| CLINICAL PROGRESS. ERRORS IN THE RECOGNITION AND TREATMENT OF HEART DISEASE..... | <i>R. Bruce Logue and J. Willis Hurst</i> | 920 |
| ABSTRACTS..... | | 933 |
| BOOK REVIEWS..... | | 955 |

INDEX OF AUTHORS

- Abelmann, W. H., 71
 Abildskov, J. A., 728
 Akerson, I. B., 271
 Altman, G. E., 809
 Angrist, A. A., 524
- Bailey, C. C., 829
 Baldes, E. J., 641
 Barnard, P. J., 343
 Beckwith, R. R., 56
 Beinfield, W. H., 742
 Berglund, E., 84
 Berkson, J., 641
 Best, M. M., 201
 Blake, H. A., 824
 Blount, S. G., Jr., 161
 Bollman, J. L., 641
 Bourgain, R., 680
 Brown, H. B., 714
 Buckley, J. J., 481
 Buka, R., 71
 Burch, G. E., 564, 728
 Burchell, H. B., 574, 705, 801
 Burnum, J. F., 362
 Byers, S. O., 491
- Camara, A. A., 430
 Case, R. B., 84
 de la Chapelle, C. E., 747
 Chessin, M., 742
 Clifford, G. O., 653
 Comroe, J. H., Jr., 81
 Conn, H. L., Jr., 517
 Cronvich, J. A., 728
- Derow, H. A., 114
 Di Mauro, S., 271
 Ditzel, J., 277
 Dobkin, A. B., 481
 Dontas, A. S., 887
 DuBose, H. H., 374
 Ducci, H., 685
 Dumke, P. R., 81
 Duncan, C. H., 201
- Edwards, J. E., 801
 Edwards, W. L. J., 843
 Eisenberg, S., 902
 Ellis, E. J., 536
 Ernstene, A. C., 766
- Fleischner, F. G., 71
 Flock, E. V., 641
 Forsee, J. H., 824
 Frank, E., 101
 Friedman, M., 491
 Friedman, N. H., 271
 Frye, C. W., 413, 423
- Gardberg, M., 544
 Gasul, B. M., 501
 Geraci, J. E., 173
 Glass, M., 524
 Glover, R. P., 207
 Golbey, M., 735
 Goldberger, E., 564
 Gordon, A. S., 413, 423
 Gorham, L. W., 221
 Gottfried, S. P., 271
 Goyette, E. M., 56, 824
- Graber, C. D., 56
 Graettinger, J. S., 384
 Graybiel, A., 384, 564
 Green, D. M., 536
 Green, H. D., 374
- Hall, R. J., 855
 Hardy, H. L., 129
 Haring, O. M., 501
 Harris, R., 221
 Harrison, J. W., 766
 Hecht, H. H., 564
 Heidorn, G., 207
 Hellems, H. K., 653
 Herzig, L., 680
 Hickam, J. B., 362
 Hoobler, S. W., 887
 Horan, L. G., 728
 Horlick, L., 30
 Hurst, J. W., 921
- Jacobs, M., 641
 Janton, O. H., 207
 Johnston, F. D., 564
- Kalser, M. H., 413, 423
 Katz, L. N., 237, 247, 251, 527, 663
 Katz, R., 685
 Keys, A., 850
 Kinsey, D., 912
 Kohn, R. M., 221
 Kossmann, C. E., 564, 747
- Ladopoulos, C. P., 735
 Landtman, B., 859, 871
 Leight, L., 653
 Leinwand, I., 94
 Lepeschkin, E., 564
 Levine, H. D., 829
 Lichtenstein, H., 195
 Lieberman, J. S., 338
 Lind, J., 195
 Logue, R. B., 921
 Luisada, A. A., 501
 Lukash, L., 524
- McCord, M. C., 161
 McCormack, L. J., 766
 Manchester, B., 691
 Manger, W. M., 641
 Manning, G. W., 401
 March, H. W., 43
 Martin, W. J., 173
 Miller, R. D., 423
 Montgomery, A. V., 721
 Montgomery, H., 442
 Moore, D. H., 94
 Morris, G., 265
 Morrow, J. D., 321
 Mosey, L., 65
 Moyer, J. H., 265
 Mueller, H., 161
 Mullertz, S., 213
 Murray, M., 255
 Myers, G. B., 564
- O'Neill, T. J. E., 207
- Packard, J. M., 384
 Page, I. H., 1, 714
 Pearson, C. M., 855
- Perera, G. A., 28
 Perry, H. M., Jr., 321
 Pick, R., 237, 247, 251
 Pomeranze, J., 742
 Pope, R. H., 271
 Prevedel, A. E., 721
- Raaschou, F., 511
 Rabkin, B., 691
 Redisch, W., 366
 Riseman, J. E. F., 809
 Rochlin, I., 843
 Roeschmann, W., 685
 Roth, F. H., 735
 Roth, G. M., 641
 Rubin, I., 232
- St. Clair, R. W., 277
 Sarnoff, L. C., 84
 Sarnoff, S. J., 84
 Schemm, F. R., 430
 Scherf, D., 735
 Schlant, R. C., 829
 Schroeder, H. A., 321
 Schweitzer, M., 699
 Shachnow, N., 232
 Shaffer, A. B., 527
 Silber, E. N., 527
 Silva, T. F., 912
 Simonson, E., 850
 Smith, R. C., 801
 Smithwick, R. H., 912
 Snider, T. H., 653
 Snyder, H., 265
 Soffer, A., 255
 Soloff, L. A., 207
 Spellman, S., 232
 Spicer, W. S., 56
 Sprague, H. B., 129
 Stamler, J., 237, 247, 251, 896
 Stead, E. A., Jr., 362
 Steele, J. M., 366
 Steinberg, L. A., 809
 Storm, O., 213
 Swan, H., 161, 721, 824
 Swan, H. J. C., 705
- Taylor, A., 331, 338
 Thompson, J. E., 912
 Todd, M., 680
 Toriello, L., 685
 Treloar, A. E., 481
 Tyler, M. D., 65
- Van Bergen, F. H., 481
 Van Loon, E. J., 201
 Vitale, A., 81
- Wallach, J. B., 524
 Wathen, J. D., 201
 Weatherhead, D. S., 481
 Wegelius, C., 195
 Wertheimer, L., 366
 Wilson, F. N., 564
 Wilson, M. G., 699
 Wolff, L., 282
 Wood, E. H., 705
 Wood, J. C., 517
 Wright, I. S., 331, 338, 680
- Zintel, H. A., 442

INDEX OF SUBJECTS

(Page numbers in italics refer to abstracts)

- Abdomen**, in vascular pooling associated with atropinization, 426
- Abscess**, of myocardium, 758
- Acetate**, turnover of
in hyperthyroidism, 595
in hypothyroidism, 595
normal, 595
- Acetylcholine**
in heart, 942
for ventricular fibrillation after ventriculotomy, 723-724
- Acetylsalicylic acid**, in rheumatic myocarditis, 761, 762
- Acidosis**, in chronic kidney disease, 122-123
- Aconitine**, arrhythmia after, in cold-blooded heart, 939
- Acrosclerosis**, iliac for, 382
- ACTH**. *See* Corticotropin
- Adenosine 5-monophosphate**, and serum cholesterol, 25
- Adrenalectomy**
bilateral, for hypertension, 782
and cerebral blood flow before and after adrenalectomy, 781
- Adrenal gland**
ascorbic acid in
after pressor amines, 634
after renin injection, 140
resection of for hypertension, 780
sodium-retaining substance in extract of, 470
- Aerosol**, bronchodilator, for pulmonary emphysema, 787
- Age (of subject)**
in atrial rupture, 228
and blood cholesterol levels, 15-16
and changes in diffusion coefficients of solutes in aortic tissue, 607
and direct vs. indirect measurement of arterial blood pressure, 486
and hepatitis, 512
and iliac tolerance, 380
and lipoprotein fractions, 10-11
and myocarditis, 748
- Air**, intracardiac, death due to, 307
- Aircrew**, electrocardiography in selection of, 384-399, 403-412
- Albumin in serum**
of professional blood donors, 98
and serum lipids, 94-99
- Alcohol**, and vasoconstriction due to frostbite, 469
- Alkaloid**
cinchona
for angina pectoris, 809-821
toxicity of, 817, 820-821
dihydrogenated ergot. *See* Hydergine
- ergot, dihydrogenated. *See* Hydergine
- veratrum, in pregnancy with toxemia and hypertension, 143, 144
- Alloxan**, protection due to, in experimental atherosclerosis, 793
- Alpha toxin**, of *Clostridium welchii*, in determination of stability of serum lipoprotein, 31-40
- Alveolitis**, necrotizing pulmonary, with acute glomerulonephritis and periarteritis nodosa, 787
- American Heart Association, Inc.**
anatomic cardiac stamps, 477, 639
"Arteriosclerosis," a film, 478
"Atlas of Congenital Cardiac Disease," 639, 800
Blakeslee Awards, 475, 477
career investigators, 151-157
Committee on Anticoagulants, 638
Committee on Electrocardiography, on standardization of electrocardiographic and vectorcardiographic leads, 564-572
Conner Memorial Lecture, 1-27
Council for High Blood Pressure Research, 477, 638
Council on Rheumatic Fever and Congenital Heart Disease, 477
courses
in electrocardiographic interpretation, 160
in practical electrocardiology, 478
established investigators continued, 151
new, 152
film on atherosclerosis, 478
grant awards continued, 154
new, 155
Life Insurance Research Fund Fellowships and Grants, 479
meetings, 160
new officers of Scientific Council, 799
research awards, 151-157, 479
applications for, 157
research fellows
new, 153
renewal, 152
Scientific Council, 799
Second World Congress of Cardiology and 27th Scientific Sessions, 158-160, 308, 475, 476, 799
abstracts of, 638
Section on Circulation, 475
- Sixth Annual Symposium on Heart Disease, 639
Subspecialty Board, 477
- American Society for the Study of Arteriosclerosis**, eighth annual meeting
abstracts of proceedings of, 584-615
program of, 580-583
- Amine**, pressor, adrenal ascorbic acid after, 634
- Ammonium**, reversal of depressor action of quaternary compounds of, 887-894
- Amyloidosis**, heart in, 575
- Anastomosis**, aorta-coronary sinus, 940
- Anemia**
in bacterial endocarditis, 133
cardiovascular effects of, 786
in chronic kidney insufficiency, 122
hemolytic
and acute disseminated lupus erythematosus, 149
in thrombotic thrombocytopenic purpura, 47-48
sickle cell, hemodynamic studies in, 653
- Anesthesia**
cyclopropane, blood flow in muscle during, 298
high spinal, and kidney hemodynamics in pregnancy with toxemia and hypertension, 143
and pheochromocytoma, 648
- Aneurysm**
aortic
abdominal, 463, 466, 788, 945
ascending, 467
dissecting, 951
hemorrhage due to rupture of, 466
homograft in treatment of, 463
rupture of, into superior vena cava, 951
thoracic, 951
traumatic, 824-827
treatment of, 463, 945
wrapping for, 466, 948
of aortic sinus, 577
arteriosclerotic, of abdominal aorta, 788
atrial, rupture associated with, 225
of carotid artery, internal, 466
proximal arterial ligation for, 789
of coronary artery, 621
dissecting
with intracardiac rupture, 469
with migraine, 469
pain due to, 921
embolic mycotic, 791
of heart, 937

Aneurysm (Cont'd)

- multiple, into internal carotid artery, 466
- mycotic, 951
- embolic, 791
- peripheral, treatment of, 952
- saccular, of thoracic aorta, 951
- Angiitis**, necrotizing, 790
- Angina**
 - and coronary dilators, 454
 - pectoris
 - in chronic kidney disease, 122, 124
 - cinchamidine sulfate for, 813, 816, 819-821
 - cinchona alkaloids for, 809-821
 - chinchonidine sulfate for, 813, 816, 819-821
 - choline and inositol for, 588
 - cinchonine sulfate, 813, 816, 819-821
 - due to coronary atherosclerosis, electrocardiogram in, 929, 931
 - diagnosis of, 920
 - digestive studies in, 938
 - Ethaverine for, 303
 - heparin for, 775
 - inositol and choline for, 588
 - Khelltron for, 633
 - nitroglycerin for, 813, 815, 819
 - pentaerythritol tetranitrate for, 813, 815, 819
 - placebo for, 813, 815
 - procaine amide hydrochloride for, 813, 815
 - quinidine sulfate for, 813, 815-816, 819-821
 - quinine sulfate for, 813, 816, 819-821
 - resection of anginal pathway for relief of pain due to, 464
 - serum lipid in, after choline-inositol therapy, 588
 - serum albumin in, 95-97
 - serum globulin in, 95-97
- Angiocardiography**
 - in atrioventricular block, 195-200
 - death following, 945
 - and mitral valvular surgery, 635
 - radiation hazard during, 306
- Angionecrosis**, thrombocytopenic verrucal, 45-52
- Angiopathy**, diabetic, 791
- Anorexia**, due to digitalis, 931
- Antibiotic**
 - broad spectrum for enterococcal endocarditis, 178-179
 - for enterococcal bacteremia, 63
 - prophylaxis in congestive heart failure, 619
 - therapy for bacterial endocarditis, 761
- Anticoagulant**
 - Dipaxin, 685-689
 - hemopericardium after therapy with, 134
 - long-term therapy with, for cardiovascular disorders, 616
 - Marcumar, 680-684
 - in prevention of systemic ar-

- terial embolism in rheumatic heart disease, 517-525
- therapy with
 - during major surgery, 213-219
 - and survival rates in myocardial infarction, 621
- Antidiuresis**, spontaneous, during water diuresis, 470
- Antidiuretic hormone**, inactivation of, by blood serum of pregnant women, 149
- Anuria**, ion-exchange resins for, 466
- Aorta**
 - abdominal
 - aneurysm of, 463, 466, 788, 945
 - resection of, with homologous aortic graft replacement, 307
 - surgery for arteriosclerotic aneurysm of, 788
 - anastomosis of, with coronary sinus, 940
 - aneurysm of
 - cellophane wrapping of, 466
 - dissecting, 469, 951
 - rupture of, into superior vena cava, 951
 - traumatic, 824-827
 - treatment of, 945
 - wrapping for, 466, 948
 - arch of, diseases, 468
 - atherosclerosis
 - in chickens, 252
 - morphogenesis of, 598
 - cholesterol synthesis by, in vitro, 594
 - coarctation of, 135
 - acquired, 307
 - electrocardiogram in, 139, 871-876, 881-883
 - and endocardial fibro-elastosis in infancy, 936
 - with hypertrophy of right ventricle and atrium, 935
 - murmur of, 507
 - postoperative electrocardiogram in, 871-876, 881-883
 - resection of, and replacement with preserved vessel graft, 307
 - surgical treatment of, 462
- electrical potential differences across, 453
- graft of, as replacement for resection of abdominal aorta, 307
- gunshot injuries of, 463
- hypoplasia of, 618
- lipoid infiltration of, after high fat, cholesterol-free diet, 592
- metabolism of, 8
- phospholipid synthesis by, in atheromatosis, 594
- protein in, 8
- sclerosis of
 - due to cholesterol, 609
 - due to dietary deficiency of lipotropic factors, 588
 - due to epinephrine, 609
- septal defect of, congenital, 774
- stenosis of, calcific, 925

- thoracic
 - anomalies of, 776
 - arterial homograft in, 465
 - saccular aneurysm of, 951
- tissue of,
 - Krebs cycle enzymes in, 607
 - succinic dehydrogenase in, 607
- Aortic arch syndrome**, hemangioma and thrombocytopenia in, 468
- Aortic sinus**, aneurysm, of 577
- Aortic valve**
 - murmur, 506
 - rupture of, 304
 - stenosis of, 926
 - commissurotomy for, 465
- Aortitis**, syphilitic, penicillin treatment of, 302
- Aortography**,
 - intra-aortic procaine injection in, 294
 - translumbar, in localizing arterial emboli, 150
- Apoplexy**, urethral, in malignant hypertension, 627
- Appendage**
 - left atrial
 - active rheumatic lesions in, 306
 - Aschoff bodies in, 789
 - thrombosis of, 635
- Apresoline**
 - and cerebral hemodynamics in toxemia of pregnancy, 631
 - in experimental eclampsia-like syndrome, 473
 - for hypertension, 626
 - arterial, 141
 - with hexamethonium, 626
 - with Pricoline, 626
 - in hypertensive arteriosclerotic syndrome, 779
 - and kidney hemodynamics in pregnancy with toxemia and hypertension, 143
 - toxic effects of, 941, 943
 - See also Hydrazinophthalazine
- Arachnodactyly**, 467
- Aramine**, 89
 - arterial hypotension after, in coronary insufficiency, 90
 - arterial pressure after, 85
 - cardiac output after, in coronary insufficiency, 90
 - in cardiogenic shock, 84-92
 - hemodynamic effects of, 86-87
 - cerebral, 265-270
 - myocardium after, 87-92
 - pulse rate after, 85
 - ventricular function curves after, 87, 89
- Arch**, aortic, diseases of, 468
- Arfonad**
 - controlled hypotension with, in neurosurgery, 465
 - and kidney hemodynamics in pregnancy with toxemia and hypertension, 143
- Arrest**, cardiac, 147
 - intracardiac puncture in, 306
 - multiple episodes of, 306
 - prevention of, 947
 - treatment of, 947

Arrhythmia, 923-924

- auricular, procaine amide for, 466
- cyclopropane-epinephrine effect of ether on, 942
- due to digitalis, 931
- after endotracheal intubation, 295
- in five thousand healthy adult males, 409
- during heart surgery, 789
- in myocarditis, 752-753, 756
- after surgical correction of coarctation of aorta, 872
- of patent ductus arteriosus, 876
- transient, due to nonpenetrating chest trauma, 146
- ventricular
 - nervous mechanisms due to calcium chloride in, 458
 - neurogenic, 468
 - ouabain-induced, 65-70
- See also Fibrillation; Flutter; Pulsus alternans; Tachycardia

Arterenal, for surgery shock, 949**Arteriole**

- of lung
 - in calcific aortic stenosis, 806
 - in chronic left ventricular failure, 805
 - definition of, 802
 - in mitral stenosis, 807
 - normal, 806
 - in systemic hypertension, 806
- necrosis of, and Hyphex for hypertension, 327
- in thrombotic thrombocytopenic purpura, 43-52

Arteriography

- in arteriosclerosis, 775
- in diagnosis of spontaneous thrombosis of right internal carotid artery, 950
- femoral, in arteriosclerosis obliterans, 615

Arteriosclerosis

- American Society* for the Study of
 - abstracts of proceedings of eighth annual meeting of, 584-615
 - program of eighth annual meeting, 580-583
- arteriography in, 775
- and carcinoma of stomach, 468
- cerebral, oral Metrazol in psychoses with, 301
- cerebral circulation in, 790-791
- clinical report, 610
- coronary
 - and hypertension, 121
 - turbidity of serum in, 39
- direct surgery of, with replacement of homologous aortic graft, 307
- and hypertension, 352-355
- Apresoline for, 779
- obliterative
 - femoral arteriography in, 615
 - Ilidar for, 381
 - serum albumin in, 95-97, 99
 - serum globulin in, 95-97
- paper electrophoresis in, 775

- and peptic ulcer, 468
- peripheral, lipoprotein pattern in, 13

pulmonary

- primary, vs. thromboembolism, 951
- due to recurrent thromboembolism, 951
- and serum stability, 792
- spontaneous, in induced arteriopathy, 609
- stenosis due to, 467
- therapy of, 601

Arteritis

- diffuse, course of, 790
- necrotizing, B complex vitamins in prevention of, 600

Artery

- in atherogenesis, 20
- arteriosclerotic stenosis of, 467
- bank for, 952
- basilar, occlusion of, 938
- blood pressure in, 85
- measurement of, direct vs. indirect, 481-490
- coronary. See Coronary artery
- embolus in
 - and mitral stenosis, 208
 - prevention of, in rheumatic heart disease, 517-525
 - translumbar aortography in localizing of, 150
- homograft of, 952
- insufficiency of
 - adrenergic blocking for, 366-372
 - Dibenzylamine for, 366-372
- metabolism of, 8
- movement of plasma constituents through wall of, in atherogenesis, 3-6
- muscular, of lung
 - in calcific aortic stenosis, 806
 - in chronic left ventricular failure, 804-805
 - definition of, 802
 - in mitral stenosis, 807
 - normal, 806
 - in systemic hypertension, 806
- occlusion of
 - evaluation of treatment of, 794
 - survival after, 938
- oxygen saturation in, in pulmonary congestion and edema, 81-82
- sudden occlusion of, Ilidar for, 381
- wall of, and plasma lipids, 614

Aschoff bodies, in left atrial appendage, 789**Ascorbic acid**

- adrenal
 - after pressor amines, 634
 - after renin injection, 140
- with desoxycorticosterone acetate, in rheumatic disease, 635

Asthma

- cardiac, tetraethylammonium bromide for, 628
- in differential diagnosis, 922

Asystole, ventricular, multiple episodes of, 306**Atelectasis, lung circulation in, 630****Atherogenesis, 3**

- in cholesterol-fed chicks
 - after adrenal corticoids, 247-250
 - and corticotropin, 237-244, 247-250
 - and cortisone, 237-244
 - estrogen prophylaxis of, 247-250
 - and hydrocortisone, 237-244
- in cholesterol-fed hens, 251-254
- cholesterol-phospholipid ratio, 16-17
- chylomicron in, 18
- and compound F, 240, 243
- coronary, and estrogen, 247-250, 251-254
- after corticotropin in cholesterol-fed chicks, 237-244, 247-250
- after cortisone in cholesterol-fed chicks, 237-244
- and estrogen, 25
- experimental, 4-6
 - factors predisposing to, 4-5
 - methods of, 4-6
- heparin in, 14-15
- after hydrocortisone in cholesterol-fed chicks, 237-244
- iodide in, 23-24
- mast cell in, 15
- in rabbit, after intravenous injection of colloidal solution, 597
- sterol metabolism in, 6-8
- thyroid in, 23-24

Atheromata, in vitro production of, 599**Atheromatosis, aortic synthesis of phospholipid in, 594****Atherosclerosis, 791**

- abnormal plasma in, 15
- in aged subjects, 605
- and alloxan protection, 793
- anatomic factors in, 19-20
- in animals, 6
- in aorta in chickens, 252
- blood constituents in, 271-275
- blood lipids in, 585
- and body type, 19
- Conner Memorial Lecture, 1-27
- coronary
 - clinical diagnosis of, 621
 - electrocardiogram in angina pectoris due to, 929, 931
 - and plasma lipid partition after heparin, 935
 - inhibition of, in cholesterol-fed, egg-producing hens, 251-254
 - intramural vs. extramural, 603
 - serum lipoprotein in, 621
- detection of, 20
- and diet, 20-23
- and fat tolerance, 742-746
- filtration concept of, 2-4
- fractionations in, 271-275
- heredity in, 19
- and heparin in cholesterol-fed rabbit, 590
- and lecithin, 25
- and lipoproteins, 11-12
- morphogenesis of, in swine aortas, 598

Atherosclerosis (Cont'd)

- premature and essential hyperlipemia, 611
- in rats, 5
- after forced feeding of vegetable oil, 592
- rate of regression of, 597
- and serum cholesterol levels, 744-745
- and serum fatty acids, 745
- serum lipoprotein in, stability of, 30-40
- and sitosterol, 25
- and starvation, 25
- and testosterone, 25
- thromboembolic vs. primary pulmonary, 951
- treatment of, 26-27
- xanthoma in, 790
- Atrabrine**, for lupus erythematosus, 457
- Atrial appendage**
 - left
 - active rheumatic lesions in, 306
 - Aschoff bodies in, 789
 - thrombosis of, 635
- Atriogram**, in congenital cardiopathies, 295
- Atropine**
 - postural hypotension induced by, 413-421, 423-428
 - tachycardia induced by, 417
 - vascular pooling induced by, 423-428
- Atrioseptopexy**, for interatrial septal defects, 307
- Atrioventricular block**
 - complete, 195-200
 - left auricular pressure curve before and during, 145
- Atrium**
 - aneurysm of, rupture associated with, 225
 - electrokymography of, in mitral regurgitation, 71-79
 - flutter of, diagnosis, 624
 - infarction of, and atrial rupture, 223
 - interatrial communications and venoarterial shunts, 705-712
 - interatrial defects of, 528-529
 - in adults, 135
 - cyclic flow across, 531-532
 - production of, 946
 - left
 - dilatation of, in mitral stenosis and insufficiency, 211
 - hemodynamics of, in mitral stenosis, 766-771
 - myxoma of, simulating mitral stenosis, 766-771
 - suprasternal puncture of, for flow studies, 954
 - tumor of, 576
 - pressure curves of, and pulmonary capillary pressure curve, 629
 - pressure gradient in, interatrial, 527-534
 - rupture of, 221-229
 - septal defect of
 - atrioseptopexy for, 307
 - closure of, 617

- interatrial, 135, 528-529, 531-532, 705-712, 946
- murmur in, 507
- surgery for, 788
- surgical repair of, 307

See also Auricle

Aureomycin

- for bacteremia following oral surgery, 454
- and epinephrine, arrhythmia due to, 941
- prophylaxis with
 - in congestive heart failure, 619
 - in rheumatic fever, 305

Auricle

- arrhythmia of, procaine amide for, 456
 - dangerously torn, management of, 946
 - fibrillation of, 923
 - conversion of, to normal sinus rhythm, 521
 - hyperactive carotid sinus reflex in, 146
 - with mitral stenosis, and embolism, 520-521
 - and mural thrombi in bacterial endocarditis, 525
 - paroxysmal, 924
 - flutter of
 - diagnosis of, 924
 - spontaneous, 298
 - left
 - herniation of, 618
 - pressure in, in man, 299
 - pressure curve in, before and during atrioventricular block, 145
 - myocardium of, electrocardiographic localization of damage to, 140
 - septal defect of, surgical closure of, 461
 - tachycardia of
 - paroxysmal, 923
 - persistent, 232-235
- See also Atrium

Auricular appendage

- left
 - active rheumatic lesions in, 306
 - Aschoff bodies in, 789
 - thrombosis of, 635

Auscultation, in mitral insufficiency and stenosis, 208, 210**Auscultatory method**, for measurement of arterial blood pressure, 487-489**Autonomic nervous system**, hypotension due to disease of, 362-364**Aviator**, electrocardiography in selection of, 384-399, 403-412**Bacitracin**, for endocarditis enterococcal, 179, 186, 187 staphylococcal, 63**Bacteremia**

- gram positive, therapy of, 56-64
- after oral surgery, aureomycin for, 454

Bacterial test, in enterococcal endocarditis, 187**Ballistocardiogram**

- in coronary artery disease
 - after exercise, 139
 - after smoking, 139
- after exercise, 139
- in mitral insufficiency, 210
- after smoking, 139
 - by high school students, 777
- systolic waves of, 778

Ballistocardiograph

- aperiodic, 778
- electromagnetic, vs. high-frequency table, 139
- high-frequency table, vs. direct recording of body motion, 139
- photoelectric, vs. high-frequency table, 139
- physical properties of, 776
- piezoelectric, vs. high-frequency table, 139

Ballistocardiography

- acceleration, in coronary heart disease, 625
- with elimination of vibration properties of body, 625
- of middle-aged men, and serum cholesterol concentration, 613
- effect of second degree of freedom in, 778
- time relationships in, 139

Balthazar-Foster murmur, 458**Bank**, for arterial homografts, 952**Basilar artery**, survival after occlusion of, 938**Basophil**, circulating, after cortisone, 779**B complex vitamin**, in prevention of necrotizing arteritis, 600**Beat**, premature, in one thousand young healthy aviators at ten year follow up, 387**Beck's operation**, 940**Bedside prothrombin test**, for control of Dicumarol therapy in myocardial infarction, 691-697**Benodaine**

- and epinephrine, 647
- and norepinephrine, 647

Benzethacil, in plasma, after single oral doses, 301**Beriberi**, and heart failure, 576**Berylliosis**

- and Boeck's sarcoid, 131
- and pregnancy, 130
- and pulmonary hypertension mistaken for rheumatic fever, 129

Bile, and cholesterol metabolism, 7**Bile duct**, obstruction of in experimental kidney hypertension, 144**serum lipoprotein pattern characteristic of**, 586**Bilirubin**, in serum, in thrombotic thrombocytopenic purpura, 48**Bio-electricity**, in etiology of intravascular thrombosis, 292

- Bishydroxycoumarin**, poisoning due to, 474
- Bladder**, urinary, pheochromocytoma of, 141
- Bleeding time**, prolonged corticotropin for, 292
cortisone for, 292
- Blister**, due to cantharides in rheumatic fever, 459
- Block**
adrenergic
adrenal ascorbic acid after, 634
for arterial insufficiency in extremity, 366-372
with Dibenzylamine, 366-372
with lidar, 374-383
atrioventricular
complete, 195-200
left auricular pressure curve before and during, 145
in myocarditis, 757
autonomic, in prevention of neurogenic ventricular arrhythmia, 458
bundle-branch
alternation of, 622
in five thousand healthy adult males, 406-407
rare type of, in syphilis, 453
right, in differential diagnosis, 930
in myocarditis, 757
fiber, 294
ganglionic
due to atropine, 427
tolerance to, 887-894
intraventricular, in myocarditis, 757
stellate ganglion, value of, 473
- Blood**
carbon dioxide partial pressure in, 146
circulating, coagulation in, 359
cholesterol in
in atherosclerosis, 273
and cholesterol in diet, 21
and fat in diet, 21
constituents of
in atherosclerosis, 271-275
in depancreatized rabbits on various diets, 596
gas in, after continuous intravenous Neo-Syneprine, 147
gram-positive bacteremia in, 56-64
lipid in
in atherosclerosis, 273, 585
after estrogen, 25
and hypoproteinemia, 18
non-dietary influences, 23-26
nonprotein nitrogen in, and Hyphex for hypertension, 325
oxygen content of, spectrophotometric estimation of, 471
oxygen partial pressure in, 146
percentage oxygen saturation of, spectrophotometric estimation of, 471
phosphate in, in atherosclerosis, 274
phospholipid in, in atherosclerosis, 273
pressor in, salt-fed rabbit as test object for, 297
protein in
in myocardial infarction, 138
in rheumatic fever, 460
in thrombotic thrombocytopenic purpura, 48
- Blood donors**, professional, albumin-globulin ratio in, 98
- Blood flow**
in bone marrow
in leukemia, 453
in neoplastic diseases, 453
coronary, measurement of, using rate of myocardial nitrous oxide desaturation, 298
after hexamethonium chloride, 889-891
kidney, after hemorrhage, 145
liver, after hemorrhage, 145
in muscle
during cyclopropane anesthesia, 298
after ultrasonic irradiation, 297
after tetraethylammonium chloride, 889-891
venous, 443-444
during Valsalva maneuver, 146
See also Circulation
- Blood pressure**
arterial
after Aramine, 85
measurement of, direct vs. indirect, 481-490
after atropine sulphate, 415, 423-425, 426
cerebral
after Aramine, 267
after norepinephrine, 267
after continuous intravenous Neo-Syneprine, 147
after corticotropin in cholesterol-fed chicks, 240, 243
after cortisone in cholesterol-fed chicks, 240, 243
after dietary stress followed by salt, 784
after discontinuous decompression in rat, 471
in hepatitis, 513
and hexamethonium, 888-889, 942
high. *See* Hypertension
after hydrocortisone in cholesterol-fed chicks, 240, 243
of hypertensive rats, and dietary potassium, 779
after Hyphex for hypertension, 326
low. *See* Hypotension
new instrument for continuous recording of, 472
and postural change, 415
pulmonary arterial
in mitral stenosis, 147
and oxygen content, 451
and sodium excretion, 917
and sodium output, 536-542
during surgery, 466
after tetraethylammonium chloride, 887-889
- Blood prothrombin test**, for control of Dicumarol therapy in myocardial infarction, 691-697
- Blood vessel**
in atherogenesis, 20
conjunctival photography of, 278-281
large, controlled hypotension for surgery in, 952
metabolism of, 8
pulsation of, and lymph pressure, 629
sensitivity of, to epinephrine after sympathectomy, 462
See also Artery; Capillary; Vein
- Blood volume**
in congestive heart failure, 902-910
pulmonary, in regulation of circulation, 148
- Body build**
and atherosclerosis, 19
and direct vs. indirect measurement of arterial blood pressure, 485-486
- Body water**, after corticotropin in rheumatic disease, 306
- Boeck's sarcoid**, and berylliosis, 131
- Bone marrow**
blood flow in neoplastic diseases, 453
in thrombotic thrombocytopenic purpura, 48
- Book reviews**
Altschule, M. D.: *Acute Pulmonary Edema*, 957
Barcroft, H., and Swan, H. J. C.: *Sympathetic Control of Human Blood Vessels*, 956
Burch, G. E.: *Primer of Cardiology*, 957
Burch, G. E.: *Primer of Congestive Heart Failure*, 960
Cabot, C.: *Motion of the Heart; the Story of Cardiovascular Research*, 797
Koller, E. K., and Katz, J.: *Bibliography of the World Literature on Blood Pressure. (1920-1950). Volume I (Authors and Titles), Volume II (Author Index and Title Index), Volume III (Abstracts)*, 959
Lev, M.: *Autopsy Diagnosis of Congenitally Malformed Hearts*, 958
Lipman, B. S., and Massie, E.: *Clinical Unipolar Electrocardiography*, 960
Pratt, G. H.: *Cardiovascular Surgery*, 798
Reich, N. E.: *Uncommon Heart Diseases*, 956
Sclar, M.: *Heart and Circulation, Diagnosis and Treatment*, 798
Vogl, A.: *Diuretic Therapy; The Pharmacology of Diuretic Agents and the Clinical Management of the Edematous Patient*, 959
- Bradycardia**
in myocarditis, 752

Bradycardia (Cont'd)

sinus, in one thousand young healthy aviators at ten year follow up, 386

Brain

arteriosclerotic, oral Metrazol in psychoses with, 301
cerebral blood flow in, in essential hypertension, before and after adrenalectomy, 781
circulation in
in arteriosclerosis, 790-791
after hexamethonium bromide in hypertension, 296
in hypertension, 790-791
edema in, and Hyphex for hypertension, 325
extracts of, in cholesterol conversion, 25
and endogenous hypercholesteremia, 606
hemodynamics in, in toxemia of pregnancy, 631
hemodynamic response of
to Aramine, 265-270
to norepinephrine, 265-270
hemorrhage into, in hepatitis, 512
after hypothermia, 794
oxygen consumption of, in essential hypertension, 781
vascular accidents to, 467

Breathing

positive pressure, for pulmonary emphysema, 787
work required for, in emphysema, 794

Bronchodilator, aerosolized, for pulmonary emphysema, 787

Bundle branch block

alternation of, 622
in five thousand healthy adult males, 406-407
rare type, in syphilis, 453
right, in differential diagnosis, 930
in myocarditis, 757

Butanol, protein-bound iodine insoluble in, and oral iodide, 716

Calcium, in conversion of fibrinogen to fibrin, 935

Calcium chloride, nervous mechanism due to, in ventricular arrhythmia, 458

Canadian air force, electrocardiography in selection of, 384-400, 403-412

Cantharides, fluid from blisters due to, in rheumatic fever, 459

Capillary

fragility, 298
of nail-bed, in Raynaud's disease, 371
resistance of, and stress, 298
in thrombotic thrombocytopenic purpura, 43-52

Carbohydrate, metabolism of, in myocardium, 451

Carbomycin, for enterococcal endocarditis, 179, 187

Carbon dioxide

partial pressure of, 146
in blood, 146

Carbonic anhydrase, inhibition of, in congestive heart failure, 136

Carcinoma of stomach, and arteriosclerosis, 468

Cardiac arrest

intracardiac puncture in, 306
multiple episodes of, 306
prevention of, 947
treatment of, 947

Cardiac output

in acute rheumatic carditis, 944
after application of leg tourniquet, 300
after Aramine, 90
in Laënnec's cirrhosis at rest, 462
regulation of, 665
in sickle cell anemia, 659
and venous return, 784

Cardiac reserve, 669-671

Cardiopexy, for coronary artery disease, 948

Cardiovascular disease, photo-fluorograms suggestive of, 461

Cardiovascular system

and DMPP, 631
long-term anticoagulant therapy for disorders of, 616
and Pitressin, 941
and pulmonary embolization, 784
and vasopressin, 941

Carditis, acute rheumatic, cardiac output in, 944

Carotid artery

internal, 950
proximal arterial ligation for, 789
multiple aneurysms into, 466
right internal, spontaneous thrombosis of, 950

Carotid sinus, pressure on, and ventricular impulse formation, 736-740

Carotid sinus nerve, section of, with Apresoline for hypertension, 626

Carotid sinus reflex, hyperactive, in auricular fibrillation, 146

Catheter, intracardiac, with inflatable balloon for producing increased venous pressures in venae cavae, 298

Catheterization, cardiac

in mitral insufficiency and stenosis, 209
in pressure reduction after hexamethonium, 780

Cation, in conversion of fibrinogen to fibrin, 935

Cation exchange resin, 149

Causalgia, Ildar for, 382

Cell, reticuloendothelial, of liver in cholesterol disposition, 492-494

in cholesterol deposition, after India ink injection, 494-495
in cholesterol synthesis, 491-492

Cellophane, for wrapping of ab-

dominal aortic aneurysm, 466

Central terminal, and dipole eccentricity, 559

Cerebral artery, dissecting aneurysm of, with migraine, 469

Cerebrum

arteriosclerotic, oral Metrazol in psychoses with, 301

circulation in
in arteriosclerosis, 790-791
in essential hypertension before and after adrenalectomy, 781

after hexamethonium bromide in hypertension, 296
in hypertension, 296, 790-791
edema in, and Hyphex for hypertension, 325

hemodynamic response of
to Aramine, 265-270
to norepinephrine, 265-270
in toxemia of pregnancy, 631
hemorrhage into, in hepatitis, 512
after hypothermia, 794

oxygen consumption of, in essential hypertension, 781
vascular accidents to, 467

Cervical disc, pain due to degeneration of, 921

Chagas' disease

intraventricular block in, 757
myocardium in, 751

Chemotherapy, of rheumatic fever, 925

Chest

funnel, electrocardiographic alterations in, 776
pain in, and heart disease, 920-921
transient arrhythmia due to nonpenetrating trauma to, 146

Chick, cholesterol fed and corticotropin, 237-244
and cortisone, 237-244
and hydrocortisone, 237-244
hyperglycemia in, after hydrocortisone, 238

lipid levels of, after hydrocortisone, 238-239
plasma glucose in, after hydrocortisone, 238-239

Childhood

heart failure in, 923
primary myocardial disease of, 300

Chloramphenicol

for bacteremia, 62
enterococci, 63
for enterococcal endocarditis, 179, 187

Chlorguanide hydrochloride, for angina pectoris, 813, 817

Chloroquine, for angina pectoris, 813, 817

Chlortetracycline

for bacteremia, 62
enterococci, 63
following oral surgery, 454
for enterococcal endocarditis, 178-179, 187

Cholesterogenesis, 7

- Cholestenone**, in cholesterol conversion, 25
- Cholesterol**
 absorption of, 6-7
 aortic sclerosis due to, 609
 biosynthesis of, by aorta in vitro, 694
 in blood
 in atherosclerosis, 273
 and cholesterol in diet, 21
 and fat in diet, 21
 breakdown of, in body, 7
 conversion of, into coprosterol, 25
 dietary
 and atherogenesis in chicks, 237-244, 247-250
 and atherogenesis in hen, 251-254
 and blood cholesterol, 21-22
 distribution of
 by liver reticuloendothelial cells, 492-494
 in lipoproteins, 17-18
 esterified, 7
 liver deposition of
 after iodine administration, 23
 after injection of India ink, 494
 liver synthesis of
 dietary influences on, 612
 hormonal influences on, 612
 in mammals, 491-499
 metabolism of, 6-8, 699
 protein-bound iodine in, 24
 and phytosterol, 25
 in plasma
 and age of subject, 15-16
 after injection of India ink and excess cholesterol, 495-498
 liver in metabolism of, 7
 and myocardial infarction, 13
 precursors of, 7, 8
 in serum
 and adenosine 5-monophosphate, 25
 and ballistocardiographic characteristics of middle-aged men, 613
 and diet, 20-21
 gerontal, 474, 613
 in Italy, 606
 vs. low density lipoprotein in familial hypercholesterolemia, 608
 and obesity, 744-745
 after plant sterol administration, 589
 sitosterol in lowering of, 201-205
 synthesis of
 in body, 7, 22
 liver reticuloendothelial cells in, 491-492
- Cholesterol-phospholipid ratio**, in atherogenesis, 16-17
- Choline**
 and angina pectoris, 588
 deficiency of, and cardiovascular damage, 588
- Chordae tendinae**, rupture of, 577
- Chromic chloride**, radioactive, in plasma volume determination, 459
- Chromium**, radioactive, in determining effect of congestive heart failure on blood volume, 902-910
- Chylomicron**
 in atherogenesis, 18
 protein associated with, 596
- Chylomicronemia**
 and fatty acid absorption, 953
 postalbuminary, and heparin, 134
 and protamine sulphate, 134
- Cigar**, electrocardiogram after smoking of, 138
- Cigarette**
 ballistocardiogram after smoking of, by high school youth, 777
 electrocardiogram after smoking of, 138
- Cinchamidine sulfate**, for angina pectoris, 813, 816, 819-821
- Cinchona alkaloids**
 for angina pectoris, 809-821
 toxicity of, 817, 820-821
 for hypertension, 626
- Cinchonidine sulfate**, for angina pectoris, 813, 816, 819-821
- Cinchonine sulfate**, for angina pectoris, 813, 816, 819-821
- Circulation**
 cerebral
 in arteriosclerosis, 790-791
 after hexamethonium bromide in hypertension, 296
 in hypertension, 296, 790-791
 in toxemia of pregnancy, 631
 cessation of, in hypothermia, 305
 collateral, of lung, 784
 of kidney, and toxemia of pregnancy, 149
 of lung, in atelectasis, 630
 peripheral
 interpretation of tests of, 608
 in older subjects, 584
 pulmonary blood volume in regulation of, 148
 See also Blood flow
- Cirrhosis**, Laënnec's, 452
- Citrate**, urinary excretion of, during potassium deficiency, 472
- Citric acid**, in serum, in atherosclerosis, 274
- Claudication**, intermittent, Di-benzyline for, 371
- Clearing factor**, 14-15, 591
 lipemia, 590, 611
 production of, and hemorrhagic lipemia, 611
- Clostridium welchii**, in determination of stability of serum lipoproteins, 31
- Clotting time**, and Paritol, 134
 See also Coagulation
- Clubbing**, familial, 634
- Coagulation**
 acceleration of, by thrombin action on platelets, 934
 in circulating blood, 359
 defect of, acquired, 934
 intravascular, trypsin-induced, 333-336
 and Paritol, 134
- Coarctation of aorta**, 135
 acquired, resection of, and replacement with preserved vessel graft, 307
 electrocardiogram in, 139
 postoperative, 871-876, 881-883
 and endocardial fibroelastosis in infancy, 936
 with hypertrophy of right ventricle and atrium, 935
 murmur of, 507
 resection of, and replacement with preserved vessel graft, 307
 surgical treatment of, 462
- Coenzyme-A**, acetyl, in lipid metabolism, 8-9
- Cogan's syndrome**, 468
- Colloid**, intravenous
 atherogenesis after, 597
 hyperlipemia after, 597
- Commissurotomy**
 aortic, 465
 mitral, 460, 462
 evaluation of functional results after, 793-794
 pulmonary function studies in mitral stenosis before and after, 460
 rheumatic activity provoked by, 944
- Committee on Electrocardiography**, on standardization of electrocardiographic and vectorcardiographic leads, 564-572
- Compound F**, and atherogenesis, 240, 243
- Congestion**, of lung, arterial oxygen saturation and rales in, 81-82
- Conjunctiva**, bulbar, photography of smaller blood vessels in, 277-281
- Conner Memorial Lecture**, on atherosclerosis, 1-27
- Coronary sinus**, anastomosis of, with aorta, 940
- Contractility**
 myocardial, 84
 after Aramine, 90
 ventricular
 and carotid pressure, 736-740
 isometric, 777
- Coprosterol**, conversion of cholesterol into, 25
- Co-protein**, 14
- Coronary artery**
 aneurysm of, 621
 arteriosclerosis of, and turbidity of serum, 39
 atherogenesis in
 in cholesterol-fed hens, 251-254
 and estrogen, 247-250, 251-254
 atherosclerosis of, 603
 clinical diagnosis of, 621
 electrocardiogram in angina pectoris due to, 929-931
 and plasma lipid partition after heparin, 935
 serum lipoprotein in, 621
 blood flow in
 and left ventricular work

Coronary artery (Cont'd)

- before and after Aramine, 89-90
 - measurement of, using rate of myocardial nitrous oxide desaturation, 298
 - dilator of, 303
 - and angina, 454
 - disease of
 - acceleration ballistocardiography in, 625
 - cardiopexy for, 948
 - in chronic kidney insufficiency, 124
 - cryoglobulin in, 138
 - currents of injury in, 137
 - electrocardiogram in, 137
 - estrogen and plasma lipids in, 938
 - heart enlargement in, 939
 - and obesity, 953
 - plasma lipids in, 138
 - and work activity, 620
 - embolism in, in bacterial endocarditis, 133, 616
 - extramural, atherosclerosis in, 603
 - fat deposits in, due to dietary deficiency of lipotropic factors, 588
 - insufficiency of
 - arterial pressure in, after Aramine, 90
 - electrocardiographic diagnosis of, 624
 - and subendocardial ischemia of left ventricle, 293
 - intramural, atherosclerosis in, 603
 - lipid in wall of, 294
 - occlusion of, 136
 - heart enlargement in, 939
 - right, ligation of, 939
 - sclerosis of, and hypertension, 121
 - thrombosis of
 - after effort, 938
 - after trauma, 938
- Cor pulmonale**
- and beryllium poisoning, 131
 - in chronic pulmonary emphysema, 785
 - and mitral stenosis, 460
 - due to recurrent thromboembolism, 343-360
 - after unrecognized emboli to lungs, 950
- Corticoid**
- adrenal, and estrogen prophylaxis of cholesterol-induced coronary atherogenesis in chicks, 247-250
 - estrogen inhibition of hypertension due to, 896-900
- Corticotropin**
- and atherogenesis, 240, 243
 - and blood pressure, 240, 243
 - body water after, in rheumatic disease, 306
 - in cholesterol-fed chicks, 237-244
 - in congestive heart failure, 434-435
 - for edema, 435-437

- electrolyte after, in rheumatic disease, 306
 - and estrogen prophylaxis of cholesterol-induced coronary atherogenesis in chicks, 247-250
 - and lipid levels, 238-239
 - and plasma glucose, 238-239
 - for polyarteritis nodosa, 303
 - for prolonged bleeding time, 292
 - for rheumatic fever, 925
 - in rheumatic myocarditis, 761, 762
 - sodium retention due to potassium salts for prevention of, 625
- Cortisone**
- and atherogenesis, 240, 243
 - for berylliosis, 132
 - and blood pressure, 240, 243
 - in cholesterol-fed chicks, 237-244
 - estrogen inhibition of hypertension due to, 896-900
 - in experimental atherosclerosis, 598
 - and lipid levels, 238-239
 - and number of circulating basophils, 779
 - and number of circulating eosinophils, 779
 - and plasma glucose, 238-239
 - for prolonged bleeding time, 292
 - for rheumatic fever, 925
 - in rheumatic myocarditis, 761, 762
- Cor triatriatum, 576**
- Coughing, syncope after, 469**
- C-reactive protein, in serum in rheumatic fever, 635**
- "Crossed test," for hypertension, 626**
- Cryoglobulin, in coronary artery disease, 138**
- Currents of injury, in coronary artery disease, 137**
- Cyanosis**
- in heart disease, 926, 927
 - in patent ductus arteriosus, 927
 - in tetralogy of Fallot, 926
- Cyclopropane**
- blood flow in muscle during anesthesia with, 298
 - and epinephrine, effect of ether on arrhythmia due to, 942
- Danilone, vs. Dipaxin, 686, 687**
- Decompensation, Cardiac, thromboembolic complication after dehydration in, 936**
- Decompression, discontinuous, blood pressure after, 471**
- Deafness, bilateral, and non-syphilitic interstitial keratitis, 468**
- Deflection, intrinsicoid, standardization of, 569**
- Degeneration, fatty, of heart, 223-224**
- Dehydration**
- and hypertension in bilaterally nephrectomized dog, 780
 - and thromboembolic complication in cardiac decompensation, 936
- Depolarization, in ventricle, 137**

- Desaturation, myocardial nitrous oxide, in measurement of coronary blood flow, 298**
- Desoxycorticosterone acetate**
- with ascorbic acid, in rheumatic disease, 635
 - estrogen inhibition of hypertension due to, 896-900
 - potassium depletion due to, 943
 - in pregnancy
 - electrolyte balance after, 142
 - hemodynamics after, 142
- Dextran**
- molecular size of, in plasma volume expansion, 786
 - effect of small infusions of, 944
- Dextran sulphate, therapeutic trial of, synthetic analogue of, 632**
- Diabetes mellitus**
- angiopathy in, 791
 - and lipid in coronary artery wall, 294
 - lipoproteins in, 14
 - serum polysaccharides in, 791
 - vascular bed of bulbar conjunctiva in, 280
 - vascular disease due to high vegetable-fat diet in, 593
- Diamox, for congestive heart failure, 136, 455**
- Diarrhea, after cinchona alkaloids, 820**
- Dibenzazepine. See Ilidar**
- Dibenzyline**
- for arterial hypertension, 141
 - for arterial insufficiency in extremity, 366-372
 - for intermittent claudication, 371
 - for obliterative arteriosclerosis, 369
 - with gangrene, 369
 - for Raynaud's disease, 367-368, 371
 - for thromboangiitis obliterans, 368
- Dicumarol**
- vs. Dipaxin, 687
 - for myocardial infarction, control of therapy by prothrombin test, 691-697
 - poisoning due to, 474
 - in prevention of systemic arterial embolism in rheumatic heart disease, 517-525
 - therapy with, during major surgery, 213-219
- Diet**
- and atherosclerosis, 20-23
 - deficient
 - heart lesion due to, 602
 - vascular lesion due to, 602
 - and rate of regression of atherosclerosis, 597
 - of hypercholesterol, 597
 - and serum cholesterol, 20-21
- Diffusion coefficients, of solutes in human aortic tissue, 607**
- Digestion, and angina pectoris, 938**
- Digitalis**
- anorexia due to, 931
 - arrhythmia due to, 931
 - and electrocardiogram, 930

- errors in therapy with, 931
intoxication due to, 931
toxicity of, 931
- Digitalization**, adequate, 931
- Digitoxin**
in edema fluids, 630
radioactive, myocardium after exposure to, in vitro, 136
in therapy, 931
- Dihydrocholesterol**
absorbability of, 689
and atherosclerosis, 25
- Dihydrostreptomycin**, for enterococcal endocarditis, 180, 185, 190-191
- Dilator**, coronary, and angina, 454
- Diodrast**, death following, 945
- Dipaxin**, 685-689
- Diphenylhydantoin Sodium**, for ouabain-induced ventricular tachycardia, 65-70
- Diphosphate**, and Dipaxin-induced hypoprothrombinemia, 687
- Diphtheria**
heart disease after, 622
and myocarditis, 749
myocarditis after, 762
- Dipole**, effects on central terminal of eccentricity of, 544-562
- Disc**, cervical, pain due to degeneration of, 921
- Dissociation**, auriculoventricular, QRS complex in, 624
- Diuresis**
due to Diamox, 455
after isotonic saline solution, in seated subjects, 147
due to Mercuhydrin, 941
mercurial, 303, 677, 941
in congestive heart failure, 932
due to Neohydrin, 303, 941
due to Parephyllin, 941
water, and spontaneous anti-diuresis, 470
- Diverticulum**, epiphrenic, of esophagus, 471
- Dizziness**, after cinchona alkaloids, 821
- DMPP**, cardiovascular action of, 631
- Drainage**, pulmonary venous, complete anomalous, 785
- Duchosal-Sulzer system**, of vectorcardiography, 101-113
- Ductus arteriosus**, patent, 135
closure of, in healing of subacute bacterial endocarditis, 133
cyanosis in, 927
electrocardiogram in, 294, 506, 931
postoperative, 876-883
etiology of, 136
murmur in, 506-509, 926
phonocardiography in, 501-509
with pulmonary hypertension, 135
with reversal of blood flow corrected by surgery, 617
and vascular rings, 773
- Dyspnea**
in anemia, and chronic kidney disease, 122
in chronic kidney insufficiency, 125
in differential diagnosis, 922
- Ebstein's malformation of tricuspid valve**, 576, 772
- Eclampsia-like syndrome**, Apresoline in, 473
- Edema**
cerebral, 325
in chronic kidney disease, 125
in congestive heart failure, hypertonie saline for, 629
in differential diagnosis, 922
digitoxin fluid of, 630
formation of, 430-431, 433, 673-678
with hyponatremia, 432-434
intractable, 148, 292, 431, 432, 435-437
of leg, and heart disease, 578
of lung
in differential diagnosis, 928
in heart failure with acute glomerulonephritis, 117
in kidney insufficiency, 124
rales and arterial oxygen saturation in, 81-82
tetraethylammonium bromide for, 628
nephrotic syndrome with, 124
resistant, 148, 292, 431, 432
corticotropin for, 435-437
sodium replacement in, 432-433
uremic, of lungs, 124
- Effort**, and coronary thrombosis, 938
- Effusion**
pericardial, 928
massive, 452, 628
pericarditis with, pneumopericardium for, 634
pleural, intrapulmonary, 954
- Egg**, dietary, and rheumatic fever, 944
- Eisenmenger's complex**, 927
- Electricity**, of tissue, in etiology of intravascular thrombosis, 292
- Electrocardiogram**
in acute glomerulonephritis, 115
in angina pectoris
due to coronary atherosclerosis, 929, 931
during therapy, 817-818
in atrial rupture, 226
in coarctation of aorta, 139
in congestive heart failure, 930
in coronary artery disease, 137
and digitalis, 930
in differential diagnosis of heart disease, 928-931
dipole eccentricity of, 544-562
during endotracheal intubation, 295
in epidemic hemorrhagic fever, 855-858
errors in understanding of, 930
in funnel chest, 776
in glomerulonephritis, 115
and hiccup, 777
after Hydergine, 633
of infants less than one day old, 140
in mitral insufficiency and stenosis, 209, 211
in myocarditis, 755-761
of newborn, 140
from one thousand young healthy aviators, ten year follow-up, 384-399, 411
in patent ductus arteriosus, 294, 506, 930
physical problems of, 776
postprandial changes in, 843-849
in potassium intoxication, 120
of scar on posterior wall, 777
simulating myocardial injury, 623
after smoking, 138
storage of, 295
in subacute endocarditis, 133
transmission of, 295
after trypsin administration, 334, 338-342
in Wolff-Parkinson-White syndrome, 286
- Electrocardiograph**, standardization of, 565
- Electrocardiography**
in aircrew selection, 401-412
in isolated valvular pulmonic stenosis, 163, 169
in localization of auricular myocardial damage, 140
nomenclature, standardization of, 568-570
in pulmonary embolism, 623
standardization of leads in, 565-570
technics, standardization of, 566-568
and therapy, 930
- Electrokymogram**
atrial, in mitral regurgitation, 71-79
left auricular, in mitral insufficiency and stenosis, 209-210
left ventricular, after myocardial infarction, 138
in mitral stenosis, 945
in Wolff-Parkinson-White syndrome, 624
- Electrolyte**
balance, in congestive heart failure with kidney disease, 126
after corticotropin in rheumatic disease, 306
deficits in, in cardiovascular-renal disease, 430-441
disturbances of, in chronic kidney disease, 122-123
excretion of
after hexamethonium for hypertension, 297
during induced congestion of vena cava, 299
and kidney function, 470
after Neohydrin, 634
in plasma, after strophanthin, 787
urinary, Pitressin-induced excretion of, as function of water retention, 147
urinary, after strophanthin, 787
- Electrophoresis**
of blood proteins in myocardial infarction, 138

- Electrophoresis** (*Cont'd*)
 paper in arteriosclerosis, 775
- Embolism**
 arterial
 Dicumarol prophylaxis for, 517-525
 and mitral regurgitation, 208
 prevention of, in rheumatic heart disease, 517-527
 translumbar aortography in localizing of, 150
 in coronary artery in bacterial endocarditis, 133, 616
 in mitral stenosis with auricular fibrillation, 520-521
 mycotic aneurysm due to, 791
 paradoxical, 466
 peripheral, artificial, 790
 pulmonary
 complicating trypsin therapy, 950
 diagnosis of, 928
 in differential diagnosis 930
 electrocardiographic alterations in, 623
 unrecognized, *cor pulmonale* after, 950
- Emesis**, after ouabain, 66
- Emotion**
 and the heart in chronic kidney disease, 126
 and kidney function, 142
- Emphysema**, pulmonary
 aerosol dilator for, 787
 chronic, and arterial hypoxia, 785
 and heart failure, 578
 positive-pressure breathing for, 787
 respiratory work in, 794
- Encephalomyocarditis**, virus, 751
- Endocarditis**
 bacterial
 anemia in, 133
 antibiotic therapy of, 173-191, 761, 763
 coronary embolism in, 133, 616
 diagnosis of, 926
 embolic mycotic aneurysm in, 791
 and mural thrombi in heart, 525-525
 treatment, 762, 933
 enterococcal, penicillin for, 63
 subacute bacterial
 electrocardiogram in, 133
 in penicillin-sensitive patient, 616
 Q waves in, 772
 spontaneous healing of, 133
 subacute enterococcal, antibiotic therapy of, 173-191
- Endocardium**, thrombi in, and bacterial endocarditis, 524-525
- Enterococcus**
 endocarditis due to, streptomycin for, 63
 subacute endocarditis due to, antibiotic therapy of, 173-191
- Enzyme**
 clinical applications of, 792
- of Krebs cycle, in human aortic tissue, 607
 in lipid metabolism, 8-9
- Eosinophil**, circulating, after cortisone, 779
- Epinephrine**
 aortic sclerosis due to, 609
 and aureomycin, arrhythmia due to, 941
 and Benodaine, 647
 and cardiac effects of ether, 786
 and cardiac excitability, 456
 chemical quantitation of, in patients with pheochromocytoma, 641-651
 and cyclopropane, effect of ether on arrhythmia due to, 942
 deficient release of, in postural hypotension, 299
 kidney hemodynamics after, 627
 papillary muscle response to, 633
 in pheochromocytoma, 649-650
 and Regitine, 647
 sensitivity to, of blood vessels after sympathectomy, 462
 in tolerance to prolonged ganglionic blockade, 891
- Ergot**, dihydrogenated alkaloid of. *See* Hydergine
- Erythrocyte**. *See* Red blood cell
- Erythromycin**, for enterococcal endocarditis, 179, 186-187
- Esophagogram**, auricular, in mitral insufficiency, 209
- Esophagus**
 disease of, and pulmonary changes, 954
 epiphrenic diverticulum of, 471
 hemorrhage due to rupture of aortic aneurysm into, 466
 pulse in, in mitral valve disease, 954
 spasm of, pain due to, 921
 varices in, due to malformation of portal venous system, 936
- Estrogen**
 and atherogenesis, 25
 coronary, 247-250, 251-254
 and hyperlipemia, 25
 in inhibition of corticoid hypertension, 896-900
 long-term, and serum lipoprotein levels in hypercholesterolemia, 587
 and plasma lipids in coronary artery disease, 938
 and rate of regression of atherosclerosis, 597
 of hypercholesterolemia, 597
 as therapy in males under fifty years of age with previous single myocardial infarction, 587
- Ethaverine**, for angina pectoris, 303
- Ether**, 786, 942
- Etylon**
 for cardiac asthma, 628
 for pulmonary edema, 628
- Exchange resin**
 cation, 149
 sodium-removing activity of, 302
 ion, for anuria, 456
- Exercise**
 ballistocardiogram after, in coronary artery disease, 139
 blood pressure response to, after atropine sulphate, 417
 and hexamethonium chloride, in essential hypertension, 627
- Exertion**, atrial rupture associated with, 225, 226
- Extrasystole**, ventricular, in five thousand healthy adult males, 409
- Extremity**
 lower, venous insufficiency of, 465
 malformations of, in congenital heart disease, 936
See also Leg; Limb
- Eye**, and Hyphex for hypertension, 325
- Fainting**
 after atropine sulphate, 415, 419, 426
 after coughing, 469
 differential diagnosis of, 924
- Fallot's pentalogy**, 617
- Fallot's tetralogy**, 617
 anatomic variations in, 619
 cyanosis in, 926
 differential diagnosis of, 926, 927
- Fat**
 animal, and plasma lipids, 593
 in coronary artery, due to dietary deficiency of lipotropic factors, 588
 dietary, and blood cholesterol, 21-22
 neutral
 and hypercholesterolemia, 610
 and hyperphospholipemia, 610
 in lipoproteins, 9-11
 subcutaneous, necrosis of, in infant after induced hypothermia, 636
 tolerance for, and serum lipid, 742-746
- Fatty acid**
 absorption of, and chylomicrons, 953
 in serum
 in atherosclerosis, 745
 in obesity, 745
- Ferritin**, and mortality due to tourniquet shock in mice, 470
- Fetus**
 of lamb, homeostatic regulation of resting heart rate in, 953
 risk to, from rubella during pregnancy, 135
- Fever**
 due to hydralazine, 943
 due to Iliad, 377
 and joint pains, case history, 129-132
 in myocarditis, 754
 as sign of quinidine toxicity, 631
- Fiber block**, 294

Fibrillation

- auricular
 - chronic conversion of, 924
 - conversion of, to normal sinus rhythm, 521, 924
 - diagnosis of, 923-924
 - hyperactive carotid sinus reflex in, 146
 - with mitral stenosis and embolism, 520-521
 - and mural thrombi in bacterial endocarditis, 525
 - T wave in, 294
- ventricular
 - in hypothermic dog, 721-726
 - and potassium, 721-722, 723-726
 - prostagline inhibition of, 721-726

Fibrinogen

- concentration of, in acute myocardial infarction, 938
- conversion of, to fibrin, 935

Fibroelastosis, in infancy, and adult-type coarctation of aorta, 936**Fibrosis**

- intimal, of pulmonary artery in lymphangitis carcinoma, 356-359
- myocardial, definition, 750

Fiedler's myocarditis, 751, 753, 757, 761**Finger**, familial clubbing of, 634**Fistula**

- arteriovenous, acquired, 934
- distal aortopulmonary, murmur of, 507
- pulmonary arteriovenous, in siblings, 636
- systemic arteriovenous, and heart failure, 577

Fitilmenadione, and Dipaxin-induced hypoprothrombinemia, 687**Fluid**, from cantharides blister in rheumatic fever, 459**Flush**, due to atropine, 419**Flutter**

- auricular
 - diagnosis of, 624, 924
 - spontaneous, 298
 - T wave in, 294

Foramen ovale, patent, and inter-ventricular septal defect, 530**Foster-Balthazar murmur**, 458**Foster's rule**, 458**Frostbite**, effect of alcohol on vasoconstriction due to, 469**Fundus**, ocular, and Hyphex for hypertension, 325**Funnel chest**, electrocardiographic alterations in, 776**Gall bladder disease**, pain in, 921**Gallop rhythm**

- in differential diagnosis, 922-923
- in myocarditis, 753

Ganglion

- block of
 - due to atropine, 427
 - tolerance to, 887-894

sympathetic, DMPP stimulation of, 631**Ganglionectomy**, celiac, for hypertension, 144**Gangrene**, with obliterative arteriosclerosis, Dibenzylamine for, 369**Gastrointestinal tract**, disturbances of, due to Ilidar, 377**Gitatin**, for congestive heart failure, 620, 774**Globulin**

- beta, in vascular disease, 18-19
- in serum, 95

of professional blood donors, 98**Glomerular filtration rate**, and edema formation, 674-675, 678**Glomerulonephritis****acute**

- electrocardiographic abnormalities in, 115
- heart in, 114-118
- hypertension in, 115, 117-118
- and myocardium, 115, 116
- with periarteritis nodosa, 787
- nephrotic syndrome of, 124

Glucose, in plasma**after corticotropin in cholesterol-fed chicks**, 238-239**after cortisone in cholesterol-fed chicks**, 238-239**after hydrocortisone in cholesterol-fed chicks**, 238-239**Glycosuria**, due to cortisone for berylliosis, 132**Gold**, radioactive, intrapericardial, 955**Gradient**, ventricular, in myocardial infarction, 622**Graft****aortic****electrical potential differences across**, 453**as replacement for resection of abdominal aorta**, 307**as replacement for resection of acquired coarctation of aorta**, 307**arterial, homologous**, 462**Granulomata**, in myocardium, 751**Grishman-Scherlis system**, of vectorcardiography, 101-113**Hand**, in cardiological diagnosis, 458**Head**, arteriovenous malformations of, 467**Heart****acetylcholine in**, 942**active rheumatic lesions in**, 306**in acute glomerulonephritis**, 114-118**in acute kidney failure**, 118-121**in amyloidosis**, 575**aneurysm of**, 937**anomaly complex of**, due to endocardial cushion defect, 136**architectonics**, 300**arrest**, 147**intracardiac puncture in**, 306**multiple episodes of**, 306**prevention of**, 947**treatment of**, 947**by-pass of**, with oxygenator pump, 949**cold-blooded**, after aconitine, 939**contractile power of**, 667, 669**death due to air in**, 307**depolarization potentials in**, 137**disability of**, due to strain, 953**electrocardiographic position of****after surgical correction of coarctation of aorta**, 872, 881**after surgical correction of patent ductus arteriosus**, 877**after valvulotomy in pulmonary stenosis**, 863**enlargement of**, 667, 668**in acute glomerulonephritis**, 115**and cardiac reserve**, 670**in chronic kidney disease**, 122**in coronary artery disease**, 939**in coronary occlusion**, 939**in hypertension**, 939**in myocarditis**, 753**after surgical correction of patent ductus arteriosus**, 880-881, 882**after valvulotomy in pulmonary stenosis**, 865-866**excitability of****and epinephrine**, 456**and norepinephrine**, 456**fatty degeneration of**, atrial rupture after, 223-224**in glomerulonephritis**, 114-118**hemochromatosis of**, 453**hypothermia for surgery on**, 464**inadequate compensating mechanism of**, 671**incompetent**, 663-665**mechanical efficiency of**, 672-673**insufficiency of**, in myocarditis, 753**in kidney disease**, 114-127**lesions of**, due to deficient diets, 602**in lymphoma**, malignant, 150**mechanical**, 948**in production and repair of interatrial septal defect**, 946**in miliary tuberculosis**, 630**motionless**, 630**mural thrombi in**, and bacterial endocarditis, 524-525**necrosis of**, due to dietary deficiency of lipotropic factors, 588**posterior wall of**, electrocardiographic diagnosis of scar on, 777**reserve**, 669-671**rupture of**, with dissecting aneurysm, 469**shock due to obstruction of venous return to**, 784**size of****after surgical correction of patent ductus arteriosus**, 880**after valvuloplasty for isolated valvular pulmonic stenosis**, 164

Heart (*Cont'd*)

- after valvulotomy in pulmonary stenosis, 865-866
- stress on, 667
- surgery of, hypothermia for, 464
- thrombosis in, in myocarditis, 754
- in thrombotic thrombocytopenic purpura, 49-50
- tumor of, rupture associated with, 225
- weight of, and hepatitis, 512
- Heart block**, in five thousand healthy adult males, 408
- See also* Block
- changes in incidence of, 472
- changes in types of, 472
- chest microfilms in discovery of, 150
- and chest pain, 920-921
- congenital
 - atriogram in, 295
 - diagnosis of, 926-927
 - and malformations of extremities, 936
 - phonocardiography in, 304
 - postoperative electrocardiogram in, 871-883
 - postvalvulotomy electrocardiogram in, 859-868
 - pulmonary hypertension in, 773
 - pulmonary tuberculosis in, 618
 - P waves in, 295
 - unusual forms of, 576
- coronary
 - acceleration ballistocardiography in, 625
 - in Italy, 606
 - and work activity, 620
- cyanosis in, 926, 927
- diphtheritic, 622
- and edema of leg, 578
- errors in recognition and treatment of, 920-932
- and murmur, 926
- postoperative electrocardiogram in, 859-868, 871-883
- recognition of, 920-932
- rheumatic
 - diagnosis of, 924-926
 - in pregnancy, 944
 - prevention of systemic arterial embolism in, 517-525
- treatment of, 920-932
- unusual forms of, 574-578
- valvular, atrial rupture associated with, 224
- Heart failure**
 - in acute glomerulonephritis, 115-117
 - in acute kidney failure, 118-120
 - and beriberi, 576
 - in children, 923
 - circulatory failure due to, 662-664, 672
 - congestive, 663, 664
 - in acute kidney failure, 118-120
 - antibiotic prophylaxis in, 619
 - carbonic anhydrase inhibitor in, 136
 - in chronic kidney disease, 122, 125-126
 - in chronic pulmonary emphysema, 785

- corticotropin in, 434-435
- diagnosis of, 921-923
- Diamox in, 136, 455
- effect of, on blood volume, 902-910
- in elderly, 774
- electrocardiogram in, 930
- Gitalin for, 620, 774
- kidney function in, 125
- plasma volume in, 905-910
- red cell mass in, 905-910
- treatment of edema in, 629
- treatment of hyponatremia in, 629
- due to constrictive pericarditis, 928
- depression symptoms in, 619
- edema formation in, 673-678
- and emphysema, 578
- forward and edema formation, 674
- and glomerulonephritis, 115-117
- and hemochromatosis, 576
- high output, 663-664
- and kidney disease, 118-120, 122, 125-126
- low output, 663-664
- mechanism of, Mary Scott Newbold Lecture, 663-678
- Newbold Lecture, 663-678
- and Paget's disease, 577-578
- right ventricular, in recurrent thromboembolism, 355
- and systemic arteriovenous fistula, 577
- Heart force**, circulatory changes affecting strain gauge arch measurement of, 145
- Heart rate**
 - during ageing of rats, 140
 - and cardiac reserve, 670
 - resting, homeostatic regulation of, in fetal lambs, 953
 - after surgical correction
 - of coarctation of aorta, 872
 - of patent ductus arteriosus, 877
 - of pulmonary stenosis, 862
- Heart sound**
 - first, 943
 - in myocarditis, 753
- Hemangioma**, and thrombocytopenic purpura in infants, 468
- Hemochromatosis**
 - of heart, 453
 - and heart failure, 576
- Hemodynamics**
 - atrial, 527-534
 - in mitral stenosis, 460
 - cerebral, in toxemia of pregnancy, 631
 - after continuous intravenous Neo-Synephrine, 147
 - after desoxycorticosterone acetate administration in pregnancy, 142
 - after hexamethonium, 779
 - after hydrazinophthalazine, 457
 - in isolated valvular pulmonary stenosis, 164-166
 - of kidney
 - after epinephrine, 627
 - during induced congestion of vena cava, 299
 - after norepinephrine, 627
 - in pregnancy with toxemia and hypertension, 143
 - in sickle cell anemia, 653
- Hemopericardium**, associated with anticoagulant therapy, 134
- Hemoptysis**, recurrent, with acute glomerulo - nephritis and periarteritis nodosa, 787
- Hemorrhage**
 - cerebral, in hepatitis, 512
 - due to Dicumarol therapy during surgery, 218
 - gastrointestinal, due to rupture of aortic aneurysm into esophagus, 466
 - liver blood flow after, 145
 - kidney blood flow after, 145
 - shock due to
 - intra-arterial transfusion for, 473
 - intravenous transfusion for, 473
- Hemorrhagic fever**, epidemic, electrocardiographic findings in, 855-858
- Heparin**
 - for angina pectoris, 775
 - and arteriovenous oxygen differences in atherosclerosis, 604
 - and atherosclerosis in cholesterol-fed rabbits, 590
 - in atherogenesis, 14-15
 - clearing of lipemic plasma by, 134
 - and electrophoresis of lipoprotein in hypercholesterolemia, 935
 - in essential hyperlipemia, 255-263
 - and fatty liver in cholesterol-fed rabbits, 590
 - and intermittent claudication, 134
 - and lipoprotein fractions, 11, 14-15
 - long-term, and serum lipoprotein levels in hypercholesterolemia, 587
 - in plasma, and serum low density lipoproteins, 604
 - and postalbumin chylomicro-nemia, 134
 - serum lipid response to, in essential hyperlipemia, 255-263
 - synthetic analogue of, 632
- Hepatitis**
 - and alleviation of hypertension, 513-514
 - and blood pressure, 513
 - cerebral hemorrhage in, 512
 - and heart weight, 512
 - hypertension in, 511-515
- Heredity**
 - in atherosclerosis, 19
 - in susceptibility to rheumatic fever, 699-703
- Hernia**, hiatal, pain due to, 921
- Herniation**, of left auricle, 618
- Hexamethonium**
 - and Apresoline for hypertension, 626
 - blood flow after, 880-891

- and blood pressure, 888-889, 942
cardiac catheterization after
pressure reduction due to,
780
for dissecting aortic aneurysm,
951
cerebral circulation after in
hypertension, 296
in essential hypertension, 627
hemodynamic effects of, 779
in normotensive man, 451
for hypertension, 141, 296, 297,
626
lung-changes during, 782
and 1-hydrazinophthalazine. *See*
Hyphex
in polyvinylpyrrolidone, 456
salts of, in orthopedic surgery,
943
tolerance to prolonged gangli-
onic blockade with, 887-894
- Hiccup**, and electrocardiogram,
777
- Homeostasis**, in regulation of rest-
ing heart rate in fetal lambs,
953
- Homograft**
aortic
with homologous aortic graft
replacement, 307
as replacement for resection
of acquired coarctation of
aorta, 307
arterial
bank for, 952
in thoracic aorta of growing
pigs, 465
in treatment of aneurysm of
abdominal aorta, 463
- Hospital**, admission policy of,
and mortality rates in
myocardial infarction, 620
- Hyaluronidase**, in experimental
atherosclerosis, 598
- Hydergine**, and cerebral hemody-
namics in toxemia of preg-
nancy, 631
electrocardiogram after, 633
for essential hypertension, 144
- Hydralazine**
for hypertension, 141
prolonged, 943
- Hydration**, and hypertension in
bilaterally nephrectomized
dog, 780
- Hydrazinophthalazine**
for hypertension in acute glo-
merulo-nephritis, 118
in pregnancy, 457
toxic effects of, 941
See also Apresoline
- Hydrocortisone**
and atherogenesis, 240, 243
and blood pressure, 240, 243
in cholesterol-fed chicks, 237-
244
hyperglycemia after, in chole-
sterol-fed cockerels, 238
and lipid levels, 238-239
locally-administered, for rheu-
matic disease, 635
and plasma glucose, 238-239
- Hydroxytyramine**, in pheochro-
mocytoma, 650
- Hyperbetaglobulinemia**, 19
- Hyperbetalipoproteinemia**, 18-19
- Hypercholesterolemia**
electrophoresis of lipoproteins
after heparin in, 935
endogenous, effect of brain
extract on, 606
familial, low density lipopro-
teins vs. serum cholesterol
in, 608
and hypothyroidism, 24
idiopathic, 19
genetic aspects of, 600
lipoprotein pattern in, 13
mild, and production of athero-
sclerosis in areas of vascular
injury, 613
in monkeys, 603
rate of regression of, 597
- Hyperglycemia**, after hydrocorti-
sone in cholesterol-fed cock-
erels, 238
- Hyperkalemia**, intoxication due
to, in acute kidney failure,
119-120
- Hyperlipemia**
essential
cardiovascular status in, 255-
263
heparin in, 255-263
and premature atherosclero-
sis, 611
and hypoproteinemia, 18
and neutral fat, 610
and plant sterols, 610
primary, and plasma lipid par-
tition after heparin, 935
production of, by a high fat,
cholesterol-free diet, 592
and serum phospholipids, 745
transient, after intravenous in-
jection of colloidal solu-
tions, 597
- Hyperphospholipemia**
and neutral fat, 610
and plant sterols, 610
- Hyperpnea**, in chronic kidney in-
sufficiency, 123
- Hypertensinase**, 514
- Hypertensinogen**, 514
- Hypertension**
accelerated phase of, 28-29
in acute glomerulonephritis,
115, 117-118
in acute nephritis, Veriloid for,
144
adrenal resection for, 780
bilateral, 782
alleviation of after develop-
ment of hepatitis, 513
Apresoline for, 141, 626, 779
with hexamethonium, 626
with Priscoline, 626
arterial
Apresoline for, 141
Dibenzylamine for, 141
and arteriosclerosis, 352-355
Apresoline for, 779
kidney function in, 142
due to splanchnic nerve stim-
ulation, 142
atheromatous, 614
bilateral adrenalectomy for,
782
blood pressure in after McN-181,
780
- and body fluids in bilaterally
nephrectomized dog, 780
celiac ganglionectomy for, 144
cerebral circulation in, 790-
791
due to chronic sodium chloride
toxicity, 296
cinchona alkaloids for, 626
and coronary arteriosclerosis,
121
corticoid, estrogen inhibition of,
896-900
"crossed test" for, 626
effect of emotion on kidney
function in, 142
essential, 141
cerebral blood flow in, before
and after adrenalectomy,
781
cerebral oxygen consumption
in, 781
hexamethonium chloride for,
627
Hydergine for, 144
in glomerulonephritis, 115, 117-
118
heart enlargement in, in coro-
nary artery disease, 939
in hepatitis, 511-515
hexamethonium for, 141, 296, 297
lung changes during, 782
hydralazine for, 141
hyphex for, 321-330
in kidney disease chronic, 121-
122
lipoprotein in, 12-13
and liver atrophy, subchronic,
511-515
and liver function, 511-515
malignant, 28-29, 121, 781
with renal artery occlusions,
143
urethral apoplexy in, 627
in Negro, 776
Neogermidine for, 143
in nephritis, 144
and obesity, 953
paralytic, 142
phrenic, 625
physiological properties of, 297
postemphysematous, 625
in pregnancy, 782
with toxemia, 143, 144
Protoveratrine for, 143
pulmonary, 783
and berylliosis mistaken for
rheumatic fever, 129
in congenital heart disease,
773
idiopathic, 577
pain in, 921
and patent ductus arteriosus,
135
primary, 955
secondary, 955
quinidine for, 626
quinine for, 626
renal
due to obstruction of common
bile duct, 144
after reduction of renal ar-
tery pulse pressure without
reducing mean pressure, 142
serum protein - bound iodine
fractions in, 715

- Hypertension** (*Cont'd*)
 and sodium chloride toxemia, 616
 splanchnicectomy for, 144
 sympathectomy for, 144, 780
 systemic, pulmonary vascular tree changes in, 806
 and temperature extremes, 781
 tests for, 626
 in toxemia of pregnancy
 Apresoline, 143
 Arfonad in, 143
 kidney hemodynamics in, 143
 spinal anesthesia in, 143
 veratrum alkaloid in, 144
 treatment of, 297, 627
 urinary sodium output after acute salt loads in, 912-918
 and venous congestion of limbs, before and after splanchnicectomy, 296
- Hyperthyroidism**
 acetate turnover in, 595
 lipid synthesis in, 595
- Hypertrophy**, ventricular
 left, 929
 spatial vectorcardiogram in, 728-734
 right, 929
- Hyperventilation**, in postural hypotension, 362-364
- Hypervolemia**, natrigenic, 116
- Hyphex** for hypertension, 321-330
- Hypoplasia**, of aorta, 618
- Hyponatremia**
 in congestive heart failure, hypertonic saline for, 629
 and edema, 432-434
- Hypotension**
 arterial, after Aramine in coronary insufficiency, 90
 controlled, for large blood vessel surgery, 952
 postural
 with deficient release of epinephrine and norepinephrine, 299
 hyperventilation in, 362-364
 due to lidar, 377
 induced by atropine sulfate, 413-421, 423-428
 vascular dynamics in, 452
 due to Veriloid, 633
- Hypothermia**
 cerebral effects of, 794
 cessation of circulation in, 305
 induced, subcutaneous fat necrosis in infant after, 636
 for intracardiac surgery, 464
 myocardial function in, 947
 and ventricular fibrillation in dog, 721-726
- Hypothyroidism**
 acetate turnover in, 595
 and hypercholesterolemia, 24
 lipid synthesis in, 595
 serum albumin in, 95-97
 serum globulin in, 95-97
 serum protein - bound iodine fractions in, 715
- Hypoxemia**, arterial, in chronic pulmonary emphysema, 785
- Hypoxia**, acute, 150
- Lidar**, 374-383
 side reactions, 377-379
- India ink**, injection of
 with excess cholesterol, 495-498
 liver deposition of cholesterol after, 494-495
 and mast cell function, 498-499
- Infant**
 electrocardiogram of, 140
 fibroelastosis in, and adult-type coarctation of aorta, 936
 heart tumor in, 787
 primary myocardial disease in, 300
 subcutaneous fat necrosis in, after induced hypothermia, 636
 thrombocytopenia and hemangioma in, 468
- Infarction**
 atrial, and atrial rupture, 223
 myocardial
 blood proteins in, 138
 in chronic kidney disease, 124-125
 control of Dicumarol therapy in, by blood prothrombin test, 691-697
 electrocardiographic recognition of, 929
 electrophoresis in, 939
 estrogen therapy for, in males under fifty years of age, 587
 fibrinogen concentration in, 938
 left ventricular ejection delay, 138
 and mesomorphy, 19
 mortality rates in, 293, 620
 in Negro, 776
 norepinephrine for shock in, 303
 and plasma cholesterol, 13
 quantitative estimation of severity of, 793
 serum albumin in, 96, 97
 serum globulin in, 96, 97
 severity of, 293, 793
 and shock, 303, 775
 survival rates in, and coagulant therapy, 621
 T wave in, 829-841, 929
 ventricular gradient in, 622
- Injury currents**, in coronary artery disease, 137
- Inositol**, and angina pectoris, 588
- Insufficiency**
 arterial
 adrenergic blocking for, 366-372
 Dibenzylamine for, 366-372
 in extremities, 366-372
 coronary
 arterial pressure in, after Aramine, 90
 electrocardiographic diagnosis of, 624
 and subendocardial ischemia of left ventricle, 293
 of kidney, 114
 anemia in, 122
 uremic pericarditis in, 123
 mitral
 atrial electrokymogram in, 71-79
 auricular esophagogram in, 209
- ballistocardiogram in, 210
 left auricular electrokymogram in, 209-210
 with mitral stenosis, 207-211
 surgical treatment of, 945
 wedge pressure in, 209
 myocardial, 753
 and pulsus alternans, 923
 tricuspid, 461, 923
 venous, of lower extremity, 465
- Intoxication**
 due to digitalis, 931
 due to potassium
 in acute kidney failure, 119-120
 electrocardiographic changes in, 120
 pain due to in Kimmelstiel-Wilson syndrome, 304
- Intrinsicoid deflection** after surgical correction
 of coarctation of aorta, 874-875, 881-882
 of patent ductus arteriosus, 879
 of pulmonary stenosis, 864, 869
- Intubation**, endotracheal, electrocardiogram during, 295
- Iodide**
 in atherogenesis, 23-24
 oral, and butanol-insoluble protein-bound iodine, 714-720
- Iodine**
 butanol - insoluble protein bound, and oral iodide, 714-720
 and plasma lipids, 23-24
 protein-bound, in cholesterol metabolism, 24
 radioactive, myxedema induced by, 620
- Ion exchange resin**, sodium-re-moving activity of, 302
- Iron**, in early atherosclerotic plaques, 609
- Irradiation**, ultrasonic, human skeletal muscle after, 297
- Ischemia**
 myocardial, and T wave inversion, 829-841
 subendocardial, and coronary insufficiency, 293
- Jaundice**, due to methyltestosterone, 586
- J junction**
 in left ventricular hypertrophy, 731
 in myocarditis, 759
- Joint pain**, and fever, case history, 129-132
- Jugular vein**, systolic pulsation of, 923
- Keratitis**, nonsyphilitic interstitial, and bilateral deafness, 468
- Khelltron**, for angina pectoris, 633
- Kidney**
 acute failure of
 heart in, 118-121
 potassium intoxication in, 119-120
 blood flow in
 after hemorrhage, 145
 and toxemia of pregnancy, 149

- chronic disease of
acidosis in, 122-123
anemia in, 122
angina pectoris in, 124
congestive heart failure in, 125-126
coronary failure in, 124
electrocardiographic abnormalities in, 123
electrolyte disturbance in, 122-123
and emotion, 126
heart in, 121-126
hypertension in, 121-122
myocardial infarction in, 124-125
renal function in, 121
shock in, 124-125
- chronic insufficiency of
anemia in, 122
dyspnea in, 125
edema in, 125
electrolyte balance in, 126
uremic edema of lung in, 124
uremic pericarditis in, 123
disease of, and heart disease, 114-127
function of
after application of leg tourniquet, 300
during arterial hypertension, 142
in chronic renal disease, 121
in congestive heart failure, 125
and electrolyte excretion, 470
effect of emotion on, 142
after hexamethonium for hypertension, 297
after Hyphex for hypertension, 326
impaired, 114
normal, 114
- hemodynamics of
after epinephrine, 627
after hexamethonium for hypertension, 297
during induced congestion of vena cava, 299
after norepinephrine, 627
in pregnancy with toxemia and hypertension, 143
insufficiency of, 114
lesion of, and sodium chloride toxicity, 616
plasma flow, and edema formation, 674-675, 678
polycystic disease of, and pregnancy, 794
in thrombotic thrombocytopenic purpura, 49
- Kimmelstiel - Wilson syndrome**, pain caused by potassium intoxication in, 304
- Konakion**, and Dipaxin-induced hypoprothrombinemia, 687
- Korotkoff sounds**, 488, 489
- Krebs cycle**, enzymes of, in human aortic tissue, 607
- Kussmaul breathing**, in chronic kidney insufficiency, 123
- Laënnec's cirrhosis**, cardiac output in, at rest, 452
- Lamb**, fetus, homeostatic regulation of resting heart rate in, 953
- Lanatoside C**, lethal dose of, and potassium depletion, 943
- Laryngoscopy**, after thiopental sodium anesthesia, 295
- Lead**
bipolar extremity standardization of, 566
electrocardiographic standardization of, 565-570
left intracavity, 624
precordial
in one thousand young healthy aviators at ten year follow up, 396
preponderance in, 624
standardization of, 567
unipolar esophageal, standardization of, 567-568
unipolar extremity, standardization of, 566-567
vectorcardiographic, standardization of, 564
- Lecithin**, and atherosclerosis, 25
- Lecithinase**, in determination of stability of serum lipoprotein, 31-40
- Leg**
application of tourniquet to and cardiac output, 300
and kidney function, 300
edema of, and heart disease, 578
in vascular pooling associated with atropinization, 426
See also Extremity; Limb
- Leukocytosis**, in myocarditis, 754
- Levoarterenol**, vs. levoepinephrine, 633
- Levoepinephrine**, vs. levoarterenol, 633
- Levophed**, for shock in myocardial infarction, 303
- Ligation**, proximal, for aneurysm of internal carotid artery, 789
- Limb**, venous congestion of, in hypertensives before and after splanchnicectomy, 296
See also Extremity; Leg
- Lipase**, lipoprotein, 591
- Lipemia**
clearing factor, 590
hemorrhagic, and production of clearing factor, 611
postprandial
and atherosclerosis, 742-746
and obesity, 742-746
- Lipid**
in blood
in atherosclerosis, 273, 585
after estrogen, 25
and hypoproteinemia, 18
non-dietary influences, 23-26
in coronary artery wall
diabetic, 294
non-diabetic, 294
levels of
after corticotropin in cholesterol-fed chick, 238-239
after cortisone in cholesterol-fed chicks, 238-239
after hydrocortisone in cholesterol-fed chicks, 238-239
metabolism of
coenzyme-A in, 8-9
enzyme in, 8-9
in myxedema, 471
in plasma
and arterial wall, 614
in cholesterol-fed egg-producing hens, 251
in coronary artery disease, 138
after dietary animal fat, 593
after dietary vegetable fat, 593
and estrogens in coronary artery disease, 338
heparin in clearing of, 134
after iodine administration, 23-24
and vessel wall lipid, 3
wettability of, 6
in serum
in angina pectoris, 588
in atherosclerotic males, 585
after dl-methionine, 788
fat tolerance, 742-746
in normal males, 585
partition of, after heparin, 935
and protein fractions, 94-99
after sitosterol, 590
synthesis of
in hyperthyroidism, 595
in hypothyroidism, 595
normal, 595
in vessel wall, and plasma lipid, 3
- Lipoid**, infiltration of aorta by, after high fat, cholesterol-free diet, 592
- Lipoprotein**
and atherosclerosis, 11-12
alpha, nature of, 9-10
beta
in blood, in vascular disease, 18-19
cholesterol in, 17-18
nature of, 9-10
protein of, 596
electrophoresis of, after heparin in hypercholesterolemia, 935
fractions of, after heparin, 11
in hypertension, 12-13
interconversions of, 9, 11
lipase, 591
low density
and plasma heparin, 604
vs. serum cholesterol in familial hypercholesterolemia, 608
nature of, 9-11
neutral fat in, 9, 11
patterns of
abnormal, 11-14
after heparin, 14-15
after plant sterol administration, 689
in plasma
in atherogenesis, 6
phospholipids of, 615
profile of
normal, 602
pathologic, 602
protein in, 9
in serum
in atherosclerosis, 30-40
in coronary atherosclerosis, 621
in Italy, 606

- Lipoprotein** (*Cont'd*)
 after long-term estrogen administration in hypercholesterolemia, 587
 after long-term heparin administration in hypercholesterolemia, 587
 with pattern characteristic of biliary obstruction, 586
 and plasma heparin, 604
 postmortem studies in, 605
 stability of, in atherosclerosis, 30-40
*S*_r 12-20, in atherogenesis, 11
*S*_r 20-100, in atherogenesis, 11
 ultracentrifugal measurement of, 10
 and in vitro exchange of phospholipid phosphorus, 603
- Lipotropic factor**, deficiency of, and cardiovascular damage, 588
- Liver**
 atrophy of, subchronic, 511-515
 blood flow in, after hemorrhage, 145
 cholesterol in, after iodine administration, 23
 cholesterol synthesis by dietary influences on, 612
 hormonal influences on, 612
 cirrhosis of, lipoprotein pattern in, 13
 fatty, after heparin in cholesterol-fed rabbit, 590
 function of, and hypertension, 511-515
 in plasma cholesterol metabolism, 7
 reticuloendothelial cells of in cholesterol disposition, 492-494
 in cholesterol deposition, after India ink rejection, 494-495
 in cholesterol synthesis, 491-492
 in sterol metabolism, 7
 subchronic atrophy of, hypertension in, 511-515
- Lobectomy**, and mitral valvotomy, 789
- Lung**
 atelectatic, circulation through, 630
 by-pass of, with oxygenator pump, 949
 changes in
 due to chronic left ventricular failure, 801-807
 during hexamethonium therapy for hypertension, 782
 circulation of, collateral, 784
 edema of
 in heart failure with acute glomerulonephritis, 117
 uremic, 124
 venesection for, 117
 emphysematous
 aerosol dilator for, 787
 and arterial hypoxemia, 785
 positive - pressure breathing for, 787
 in lupus erythematosus, disseminated, 148
 mechanical, in production and repair of interatrial septal defect, 946
 pulmonary artery fistula of, in siblings, 636
 tuberculous, in congenital heart disease, 618
 unrecognized emboli in, coronary pulmonary after, 950
- Lupus erythematosus**
 atabrine for, 457
 disseminated
 with hemolytic anemia, 149
 pulmonary manifestations of, 148
 vs. thrombotic thrombocytopenic purpura, 46
 quinacrine hydrochloride for, 457
 systemic, clinical pathology of, 636
- Lutembacher syndrome**, 773
- Lymph**, pressure of, and blood vessel pulsations, 629
- Lymphangitis carcinomatosa**, intimal fibrosis of pulmonary artery in, 356-359
- Lymphatics**, lymph pressure in, and blood vessel pulsations, 629
- Lymphoma**, malignant, heart in, 150
- Magnesium sulfate**, for hypertension in acute glomerulonephritis, 118
- Mammal**, cholesterol in, 491-499
- Marcumar**, 680-684
- Marian's syndrome**, 467
- Marrow**
 blood flow in, in neoplastic diseases, 453
 in thrombotic thrombocytopenic purpura, 48
- Mast cell**
 in atherogenesis, 15
 function of, after India ink injection, 498-499
- McN-181 blood pressure after**, in hypertension, 780
- Medulla oblongata**, postulated vasodilator center in, 954
- Mephyton**, and Dipaxin-induced hypoprothrombinemia, 687
- Mercuhydrin**, 941
- Mercurial**
 action of, in diuresis, 677
 in congestive heart failure, 932
 inhibition of, by succinic dehydrogenase, 940
- Mercury**, excretion of, after Neohydrin, 634
- Mesomorphy**, and myocardial infarction, 19
- Methantheline bromide**, in control of vagal cardiovascular reflex during surgery, 455
- Methyltestosterone**, jaundice due to, 586
- Metrazol**, oral, in psychoses with cerebral arteriosclerosis, 301
- Micrococcus pyogenes var. aureus**, bacteremia due to, case history, 57-59, 60-61
- Microfilm**, of chest, in discovery of heart disease, 150
- Migraine**, with dissecting aneurysm of cerebral artery, 469
- Mitral valve**
 commissurotomy
 evaluation of functional results after, 793-794
 pulmonary hypertensive pain after, 463
 disease of, esophageal pulse in, 954
 insufficiency of
 atrial electrokymogram in, 71-79
 auricular esophagram in, 209
 ballistocardiogram in, 210
 left auricular electrokymogram in, 209-210
 with mitral stenosis, 207-211
 surgical treatment of, 945
 wedge pressure curve in, 209
 murmur, 506
 regurgitating
 atrial electrokymogram in, 71-79
 pulmonary capillary curve in, 947
 stenosis of
 with auricular fibrillation, an embolism, 520-521
 commissurotomy for, 462
 and cor pulmonale, 460
 experimental, 793
 left atrium in, 460
 left auricular appendage in, 300
 left auricular electrokymogram in, 209-210, 945
 with mitral insufficiency, 207-211
 murmur of, 925
 phonocardiogram in, 210
 pulmonary arterial pressure in, 147
 pulmonary function studies in, before and after commissurotomy, 460
 pulmonary vascular tree in, 807
 simulated by myxoma of left atrium, 766-771
 surgical treatment of, 636
 tight, 943
 transauricular valve fracture in, 623
 surgery on, angiocardiology in, 635
 valvotomy
 anesthesia in management of, 463
 and lobectomy, 789
- Mononucleosis**, infectious, with acute pericarditis, 471
- Mortality**
 during Hyphex therapy for hypertension, 322-325, 330
 in myocardial infarction
 acute, 293
 and hospital admission policy, 620
 after photofluorograms suggestive of cardiovascular disease, 461

- Muller experiment**, planigraphy in, 461
- Murmur**
aortic, 506
apical systolic, in myocarditis, 753
in atrial septal defect, 507
Balthazar-Foster, 458
of calcific aortic stenosis, 925
and heart disease, 926
mitral, 506
in mitral insufficiency and stenosis, 208, 210
in patent ductus arteriosus, 506-509, 926
pulmonic, 506
vascular, over enlarged spleen, 304
in ventricular septal defect, 507
- Muscle**
blood flow in, during cyclopropane anesthesia, 298
clearance of radioactive sodium from, 469
respiratory tie of, 940
skeletal
potassium in, in experimental renal hypertension, 470
sodium in, in experimental renal hypertension, 470
after ultrasonic irradiation, 297
water in, in experimental renal hypertension, 470
ventricular, staircase contraction of, 305
- Myocarditis**, 747-763
acute, definition, 750
in Chagas' disease, 751
classification of, 751-752
clinical diagnosis of, 752-755
clinical incidence, 749-750
and communicable diseases, 749
definition, 750
diphtheritic, 762
electrocardiogram in, 755-761
Fiedler's, 751, 753, 757, 761
focal, in poliomyelitis, 149
idiopathic, 751, 753, 757, 761, 763
isolated, 751, 753, 757, 761, 763
interstitial, 751, 753, 757, 761, 763
pathologic features, 750-751
pathologic incidence, 747-749
prognosis, 761-762
rheumatic, 752
prognosis, 761
secondary to parasitic infestation, 763
symptoms, 752
treatment, 762-763
due to trichinosis, 751
viral, 578, 751
- Myocardium**
abscess of, 758
in acute glomerulo-nephritis, 115, 116
after Aramine, 87-92
carbohydrate metabolism in, 451
contractility of, 84
after Aramine, 90
- electrocardiographic pattern
simulating injury to, 623
after exposure to radioactive digitoxin in vitro, 136
fibrosis of, definition, 750
granulomata in, 751
in hypothermia, 947
and incompetency of heart, 663, 664
infarction of
blood proteins in, 138
in chronic kidney disease, 124-125
control of Dicumarol therapy in, by blood prothrombin test, 691-697
electrocardiographic recognition of, 929
electrophoresis in, 939
estrogen therapy for, in males under fifty years of age, 587
fibrinogen concentration in, 938
and left ventricular ejection delay, 138
and mesomorphy, 19
mortality rates in, 620
in Negro, 776
norepinephrine for shock in, 303
and plasma cholesterol, 13
quantitative estimation of severity of, 793
serum albumin in, 96, 97
serum globulin in, 96, 97
severity of, 293, 793
and shock, 303, 775
survival rates in, and anticoagulant therapy, 621
T wave in, 829-841, 929
ventricular gradient in, 622
insufficiency of, and pulsus alternans, 923
ischemia of, and T wave inversion, 829-841
metabolism of, after thiamine deficiency, 788
potassium in, in experimental renal hypertension, 470
primary disease of, in childhood, 300
sodium in, in experimental renal hypertension, 470
ventricular, staircase contraction of, 305
water in, in experimental renal hypertension, 470
- Myxedema**
lipid metabolism in, 471
lipoproteins in, 14
radioiodine induced, 620
- Myxoma**, of left atrium simulating mitral stenosis, 766-771
- Nail-bed**, capillaries of, in Raynaud's disease, 371
- Nausea**, after cinchona alkaloids, 820
- Neck**, veins of, in differential diagnosis, 923
- Necrosis**
arteriolar, and Hyphex for hypertension, 327
of heart, due to dietary deficiency of lipotropic factors, 588
of subcutaneous fat in infant following induced hypothermia, 636
- Negro**
hypertension in, 776
myocardial infarction in, 776
- Neogermitrine**, for hypertension, 143
- Neohydrin**, 303, 941
electrolyte excretion after, 634
mercury excretion after, 634
water excretion after, 634
- Neo-Iopax**, death following, 945
- Neomycin**, toxicity of, 59, 63
- Neo-Synephrine**, intravenous continuous, 147
- Nephritis**, acute, veriloid for hypertensive phase of, 144
- Nephrosis**
lipoprotein pattern in, 13
and plasma lipid partition after heparin, 935
- Nephrotic syndrome**, 124
- Nephrotoxicity**, due to Neomycin, 59, 63
- Nervous system**, sympathetic, DMPF stimulation of ganglion of, 631
- Neurosurgery**, Arfonad for controlled hypotension in, 465
- Newbold Lecture**, "The Mechanism of Cardiac Failure," 663-678
- Newborn**, electrocardiogram of, 140
- Nitrogen**, nonprotein, in blood, after Hyphex for hypertension, 325
- Nitroglycerin**, for angina pectoris, 813, 815, 819, 931-932
- Nitrous oxide**, myocardial desaturation in measurement of coronary blood flow, 298
- Nonelectrolyte solution**, subcutaneous, peripheral vascular collapse after, 940
- Norepinephrine**
and Benodaine, 647
and cardiac effects of ether, 786
and cardiac excitability, 456
cerebral hemodynamic response to, 265-270
chemical quantitation of, in patients with pheochromocytoma, 641-651
deficient release of, in postural hypotension, 299
kidney hemodynamics after, 627
in pheochromocytoma, 649-650
and Regitine, 647
for shock in myocardial infarction, 303
in tolerance to prolonged ganglionic blockade, 891
- Normotension**
hexamethonium bromide in, 451
urinary sodium output after acute salt loads in, 912-918
- Obesity**
and coronary disease, 953

- Obesity** (*Cont'd*)
 and fat tolerance, 742-746
 and hypertension, 953
 and serum cholesterol levels, 744-745
 and serum fatty acids, 745
- Obstruction**, biliary, serum lipoprotein pattern characteristic of, 586
- Occlusion**
 arterial, ilidlar for, 381
 of basilar artery, survival after, 938
 coronary, 136
 heart enlargement in, 939
- Organs of Zuckerkindl**, 295
- Oscillography**, endocavitary, 784
- Oscillometric method**, for measurement of arterial blood pressure, 487
- Osteoarthritis**, ilidlar for pain associated with, 382
- Ototoxicity**, due to Neomycin, 59
- Oxygen**
 arterial saturation with,
 in pulmonary congestion and edema, 81-82
 in sickle cell anemia, 655-660
 arteriovenous difference in atherosclerosis, before and after heparin, 604
 cerebral consumption of
 after Aramine, 266, 267
 in essential hypertension, 781
 after norepinephrine, 266, 267
 consumption of
 during ageing of rats, 140
 in sickle cell anemia, 655-660
 partial pressure of, in blood, 146
 in pulmonary artery, and arterial pressure, 451
- Oxygenator-pump**, in total bypass of heart and lungs, 949
- Oxytetracycline**
 for bacteremia, 62
 enterococci, 63
 for enterococcal endocarditis, 179, 187
- Pacemaker**, wandering, in one thousand young healthy aviators at ten year follow up, 386
- Paget's disease**, and heart failure, 577-578
- Pain**
 anginal, relief of, by resection of anginal pathway, 464
 associated with osteoarthritis, ilidlar for, 382
 in chest, and heart disease, 920-921
 of idiopathic pericarditis, 927
 due to potassium intoxication in Kimmelstiel-Wilson syndrome, 304
 pulmonary hypertensive, after mitral commissurotomy, 463
- Palpation and pheochromocytoma**, 648
- Pancreatotomy**
 blood constituents after, 596
 and rate of regression
 of atherosclerosis, 597
 of hypercholesterol, 597
- Papillary muscle**, potentiation of inotropic response of, to epinephrine, 633
- Papilledema**, development of, after disappearance of hypertension, 28-29
- Parabiont**, hypertension in, 142
- Paravertebral muscle**, ilidlar for spasm of, 382
- Parephyllin**, 941
- Paritol**, and clotting time, 134
- Penicillin**
 for bacteremia, 62-63
 for bacterial endocarditis in penicillin-sensitive patient, 616
 blood levels of, after Probenecid, 186, 188-189
 for enterococcal endocarditis, 63, 178, 180, 186
 with bacitracin, 179
 with dihydrostreptomycin, 180, 185, 190-191
 with streptomycin, 179, 184, 186-188, 190-191
 prophylaxis with, in streptococcal disease, 301
 sensitivity to, 616
- Penicillin G**, in plasma after single oral doses, 301
- Pentaerythritol tetranitrate**, for angina pectoris, 813, 815, 819
- Pentalogy of Fallot**, 617
- Pentaquine phosphate**, for angina pectoris, 813, 817
- Pericarditis**
 acute
 idiopathic, 577
 with infectious mononucleosis, 471
 with serum sickness, 795
 constrictive
 chronic, 578
 heart failure due to, 928
 with effusion, pneumopericardium for, 634
 idiopathic
 acute, 793
 pain of, 927
 pyogenic, 927
 rheumatic, 927
 in systemic disease, 927
 tuberculous, 927-928
 uremic, 123
- Periarthritis nodosa**
 with acute nephritis, 787
 with Cogan's syndrome, 468
- Pericardium**
 constrictive, pathogenesis of, 471
 effusion into, 628
 in differential diagnosis, 928
 massive, 452
 radiogold instilled into, 955
- Phenylindanedione**, long-term therapy with, for cardiovascular disorders, 616
- Pheochromocytoma**, 625
 and anesthesia, 648
 epinephrine in, 649-650
 hydroxytyramine in, 650
 norepinephrine in, 649-650
 and palpation, 648
 quantitation of epinephrine in patients with, 641-651
 quantitation of norepinephrine in patients with, 641-651
 of urinary bladder, 141
- Phlebography**, ascending, 465
- Phlegmasia caerulea dolens**, 795
- Phonocardiography**
 in congenital heart disease, 304
 intracardiac, 793
 of left atrium in mitral stenosis, 460
 in mitral stenosis, 210, 460
 with mitral insufficiency, 210
 in patent ductus arteriosus, 501-509
- Phosphate**, in blood, in atherosclerosis, 274
- Phosphatide**, in serum, 584
- Phospholipid**
 aortic synthesis of, in atheromatosis, 594
 in blood, in atherosclerosis, 273
 phosphorus, in vitro exchange of, between lipoproteins, 603
 of plasma lipoproteins, 615
 in serum
 in hyperlipemia, 745
 and rheumatic fever, 944
- Phospholipid-cholesterol ratio**, in atherogenesis, 16-17
- Phosphorus**, phospholipid, in vitro exchange of, between lipoproteins, 603
- Photofluorogram**, suggestive of cardiovascular disease, 461
- Photography**, of conjunctival blood vessels, 277-281
- Phytosterol**,
 dietary, and cholesterol absorption, 25
 in lowering of serum cholesterol, 201-205
- Pid-Thrombantin**, long-term therapy with, for cardiovascular disorders, 616
- Pig**, arterial homograft in thoracic aorta of, 465
- Pitressin**
 cardiovascular effects of, 941
 urinary electrolyte excretion due to, as function of water retention, 147
- Placebo**, for angina pectoris, 813, 815
- Planigraphy**
 in Muller experiment, 461
 in Valsalva maneuver, 461
- Plant**, sterol from, and cholesterol absorption, 25
- Plaque**, atherosclerotic, iron in, 609
- Plasma**
 abnormal, in atherogenesis, 15
 benzethacil in, after single oral doses, 301
 cholesterol in
 and age of subject, 15-16
 after injection of India ink and excess cholesterol, 495-498

- and myocardial infarction, 13
determination of volume of, with radioactive chromic chloride, 459
electrolytes in, after strophanthin, 787
glucose in
 after corticotropin in cholesterol-fed chicks, 238-239
 after cortisone in cholesterol-fed chicks, 238-239
 after hydrocortisone in cholesterol-fed chicks, 238-239
heparin in, and serum low density lipoproteins, 604
kidney flow of, and edema formation, 674-675, 678
lipid in
 and arterial wall, 614
 in cholesterol-fed egg-producing hens, 251
 in coronary artery disease, 138
 after dietary animal fat, 593
 after dietary vegetable fat, 593
 and estrogen in coronary artery disease, 938
 heparin in clearance of, 134
 after iodine administration, 23-24
 and vessel wall lipid, 3
wettability of, 6
lipoprotein in
 in atherogenesis, 6
 phospholipid of, 615
movement of constituents of, through arterial wall in atherogenesis, 3-6
penicillin G in, after single oral doses, 301
volume of
 in congestive heart failure, 905-910
 and molecular size of Dextran, 786
 radioactive chromic chloride in determination of, 459
Plasmin, in lysis of thrombus due to sodium morrhuate, 948
Platelet
 and thrombin in acceleration of clotting, 934
 in thrombotic thrombocytopenic purpura, 48
Pneumonia, interstitial, in poliomyelitis, 149
Pneumopericardium, for pericarditis with effusion, 634
Poisoning
 due to beryllium, 129-132
 due to bishydroxycoumarin, 474
 due to Dicumarol, 474
 See also Toxicity
Polarity, vectorcardiographic
 standardization of leads, 571
 standardization of voltages, 572
Pollomyelitis
 myocarditis in, 149, 749
 pneumonia in, 149
Polyangitis, essential, with Cogan's syndrome, 468
Polyarteritis nodosa, respiratory renal type of, 468
Polymetaphosphate, heparin-like activity of, 591
Polysaccharide, in serum, and degenerative vascular disease, 791
Polyvinylpyrrolidone, hexamethonium in, 456
Pooling, vascular, atropine-induced, 423-428
Position (of subject), and diuretic response to isotonic saline solution, 147
Postphlebotic syndrome, iliac for, 381
Posture, hypotension due to
 with deficient release of epinephrine and norepinephrine, 299
 hyperventilation in, 362-364
 after Ilidat, 377
 induced by atropine sulfate, 413-421, 423-428
Potassium
 deficiency of, 431-432
 due to desoxycorticosterone acetate, 943
 and lethal dose of lanatoside C, 943
 potassium chloride for, 431
 and urinary excretion of citrate, 472
 dietary, and blood pressure of hypertensive rats, 779
 intoxication due to
 in acute kidney failure, 119-120
 electrocardiographic changes in, 120
 pain due to, in Kimmelstiel-Wilson syndrome, 304
 in myocardium, in experimental renal hypertension, 470
 for prevention of ACTH-induced sodium retention, 625
 in skeletal muscle in experimental renal hypertension, 470
 tubular reabsorption of, 431
 tubular secretion of, 432
 and ventricular fibrillation, 721-722, 723-726
Potassium chloride, for potassium deficiency, 431
Potential, back, and mean manifest QRS axis, 560-562
Pregnancy
 and berylliosis, 130
 desoxycorticosterone acetate in electrolyte balance after, 142
 hemodynamics after, 142
 fetal risks from rubella during, 135
 hydrazinophthalazine in, 457
 inactivation of antidiuretic hormone by blood serum in, 149
 and polycystic disease of kidney, 794
 rheumatic heart disease in, 944
 toxemia of
 cerebral hemodynamics in, 631
 and kidney circulation, 149
 veratrum for, 464
 toxemia of, and hypertension
 Apresoline in, 143
 Arfonad in, 143
 kidney hemodynamics in, 143
 Protoveratrine in, 144
 spinal anesthesia in, 143
 veratrum alkaloid in, 143, 144
Preponderance, in precordial leads, 624
Pressor, in blood, salt-fed rabbit as test object for, 297
Pressor amine, adrenal ascorbic acid after, 634
Pressoreceptor, carotid, and Veriloid, 454
Pressoreceptor reflex in neurogenic hypertension, 783
Pressure
 of blood. See Blood pressure
 cardiovascular, during surgery, 466
 carotid, and ventricular contractility, 736-740
 left auricular
 before and during atrioventricular block, 145
 measurement of, 299
 partial
 of carbon dioxide in blood, 146
 of oxygen in blood, 146
 venous, intracardiac catheter with inflatable balloon for producing increase in, 298
 wedge, in pulmonary artery, 145
Pressure curve
 atrial
 and pulmonary capillary pressure curve, 629
 and pulmonary wedge pressure curve, 629
 pulmonary capillary, 299
 and atrial pressure curves, 629
 wedge, in mitral insufficiency, 209
Pressure gradient, interatrial, in man, 527-534
P-R interval
 in five thousand healthy adult males, 403-406
 in one thousand young healthy aviators at ten year follow up, 387-389, 396
 prolonged, in five thousand healthy adult males, 407-409, 411
 short, with abnormal QRS complexes and paroxysmal tachycardia, 282-291
 after surgical correction
 of coarctation of aorta, 372
 of patent ductus arteriosus, 877
 of pulmonary stenosis, 862
Priscoline, and Apresoline for hypertension, 626
Probenecid, and blood penicillin levels, 62, 63
 in enterococcal endocarditis, 186, 188-189
Procaïne, intra-aortic, in aortography, 294

- Procaine amide**
for auricular arrhythmia, 456
for ventricular tachycardia, 924
for Wolff-Parkinson-White syndrome, 634
- Procaine amide hydrochloride**
for angina pectoris, 813, 815
for ouabain-induced ventricular tachycardia, 67, 69
- Proconvertin**, after Dipaxin, 687
- Proconvertin-prothrombin level**, and Dicumarol therapy during surgery, 215
- Prostigmine**, for inhibition of ventricular fibrillation, 721-726
- Protamine sulphate**, and post-alimentary chylomicronemia, 134
- Protein**
in aorta, 8
of beta lipoprotein, 596
in blood
electrophoresis of, in myocardial infarction, 138
in myocardial infarction, 138
in rheumatic fever, 460
chylomicron associated with, 596
C-reactive, in rheumatic fever, 635
dietary, and hyperlipemia, 18
iodine bound to, and oral iodide, 716
in lipoproteins, 9
in plasma and other protein moieties, 596
in serum, in atherosclerosis, 274
- Proteinuria**, regression of, after Hyphex for hypertension, 326
- Prothrombin**, 691
after Dipaxin, 687
- Protoveratrine**, for hypertension, 143
and pregnancy with toxemia, 143, 144
- Pulmonary artery**
cardiovascular effects of embolization in, 784
intimal fibrosis of, in lymphangitis carcinomatosa, 356-359
oxygen content of, 453
and arterial pressure, 451
in mitral stenosis, 147
obtained by wedged catheter, 145
and oxygen content, 451
pressure in
before and after valvuloplasty for isolated valvular pulmonary stenosis, 164-166, 170
sclerosis of, due to recurrent thromboembolism, 343-360
- Pulmonary capillary curve**, in mitral regurgitation, 947
- Pulmonary valve**
murmur, 506
stenosis of
congenital, 772
with intact ventricular septum, 576
with interatrial communication, 529-530
isolated, 576
open valvuloplasty for, 161-171
postvalvulotomy electrocardiogram in, 859-868
valvuloplasty using mechanical heart for by-pass of right heart, 636
- Pulmonary vein**
aberrant, 618
"throttle valve" action of, 786
- Pulsation**, of blood vessel and lymph pressure, 629
- Pulse pressure**
and direct vs. indirect measurement of arterial blood pressure, 486
of renal artery, hypertension after reduction of, 142
- Pulse rate**
after Aramine, 85
after atropine sulphate, 415
425, 426
during menstrual cycle, 794
- Pulsus alternans**
dynamics of, 627
in myocardial insufficiency, 923
in myocarditis, 753
- Pulsus bigeminus**, 931
- Pump**, oxygenator, in total bypass of heart and lungs, 949
- Purpura**, thrombotic thrombocytopenic, 43-52
vs. disseminated lupus erythematosus, 46
- P wave**
in congenital cardiopathies, 295
in myocarditis, 757-758
in one thousand young healthy aviators at ten year follow up, 391
standardization of, 568
after surgical correction
of coarctation of aorta, 872, 881
of patent ductus arteriosus, 877
of pulmonary stenosis, 862
- Quinacrine hydrochloride**, for lupus erythematosus, 457
- Quinidine**
atrioventricular nodal rhythm due to, 146
for auricular flutter, 924
for chronic auricular fibrillation, 924
in conversion of auricular fibrillation to sinus rhythm, 521
fever as sign of toxicity of, 631
for hypertension, 626
for ouabain-induced ventricular tachycardia, 67, 69
resorption of, 632
for ventricular tachycardia, 924
ouabain-induced, 67, 69
- Quinidine sulfate**, for angina pectoris, 813, 815-816, 819-821
- Quinine**, for hypertension, 626
- Quinine sulfate**, for angina pectoris, 813, 816, 819-821
- Quinoline ring**, 819
- QRS complex**
abnormal, with short P-R interval and paroxysmal tachycardia, 282-291
auriculoventricular dissociation, 624
duration of
after surgical correction of coarctation of aorta, 872
after surgical correction of patent ductus arteriosus, 877
after valvulotomy in pulmonary stenosis, 862
electrical axis of
deflection of, in one thousand young healthy aviators at ten year follow up, 391-396
mean manifest, and back potentials, 560-562
spatial angle between long axis of, and longitudinal axis of ventricles, 777
after surgical correction of coarctation of aorta, 872
after surgical correction of patent ductus arteriosus, 877
after valvulotomy in pulmonary stenosis, 863
in myocarditis, 758
in one thousand young healthy aviators at ten year follow up, 387, 389
standardization of, 568-569
- QRS interval**, prolonged, 406, 407
- QRS loop**, and dipole eccentricity, 554-559
- QRS sE-loop**, in left ventricular hypertrophy, 728-734
- QRS vector**
in left ventricular hypertrophy, 929
spatial, repeat variability of, 850-853
- Q-T interval**
and left ventricular ejection period, 624
in one thousand young healthy aviators at ten year follow up, 390-391, 396
range of, 140
in rheumatic fever, 460
after surgical correction
of coarctation of aorta, 872, 881
of patent ductus arteriosus, 877
after valvulotomy in pulmonary stenosis, 863, 866
- Q wave**
in five thousand healthy adult males, 409
in Osler's subacute infectious endocarditis, 772
after surgical correction
of coarctation of aorta, 873
after patent ductus arteriosus, 877
after valvulotomy in pulmonary stenosis, 863
- Rabbit**
pulmonary arteriosclerosis and cor pulmonale in, 343-360

- salt-fed, as test object for pressors in blood of hypertensive animals, 297
- Race (of subject)**, and myocarditis, 749
- Radiation**, hazard due to, in angiocardiology, 306
- Radiochromium**, red cells tagged with, in determining effect of congestive heart failure on blood volume, 902-910
- Radiodigitoxin**, myocardium after exposure to, *in vitro*, 136
- Radiogold**, intrapericardial, 955
- Radiiodine**, myxedema induced by, 620
- Radiosodium**, clearance of, from muscle, 469
- Radiosulfur**, uptake of, by vascular tissue, 695
- Rales**
and arterial oxygen saturation in pulmonary congestion and edema, 81-82
pulmonary, 923
- Rat**, atherosclerosis in, 5
- Raynaud's disease**
Dibenzylamine for, 367-368, 371
Iliad for, 381
nail-bed capillaries in, 371
- Red blood cell**
mass of
in congestive heart failure, 905
radioactive sodium chromate in determination of, 459
radiochromium-tagged, in determining effect of congestive heart failure on blood volume, 902-910
in thrombotic thrombocytopenic purpura, 48
- Reflex**
pressor-receptor, in neurogenic hypertension, 783
vagal cardiovascular, during surgery, 455
- Regitine**, 632
and epinephrine, 647
and norepinephrine, 647
- Regurgitation**, mitral
atrial electrokymogram in, 71-79
pulmonary capillary curve in, 947
- Renal artery**
occlusion of, and malignant hypertension, 143
pulse pressure of, hypertension after reduction of, 142
- Renin**
adrenal ascorbic acid after injection of, 140
physiological properties of, 297
- Resin**
cation exchange, 149
sodium-removing activity of, 302
ion-exchange for anuria, 456
- Resistance**, peripheral, and venous return, 784
- Reticuloendothelial cell of liver**, in cholesterol deposition, 492-494
after India ink injection, 494-495
- Retinopathy**, development of, after disappearance of hypertension, 28-29
- Rheumatic disease**
body water in, after corticotropin, 306
cortisone-like effect of desoxycorticosterone acetate with ascorbic acid in, 635
hydrocortisone for, locally administered, 635
lesions due to
in heart, 306
in left auricular appendage, 306
- Rheumatic fever**
aureomycin in prophylaxis of, 305
berylliosis and pulmonary hypertension mistaken for, case history, 129-132
blood proteins in, 460
cantharides blister fluid in, 459
C-reactive protein in serum in, 635
and dietary eggs, 944
and enterococcal endocarditis, 189
heart disease due to, 924-926
in pregnancy, 944
prevention of systemic arterial embolism in, 517-525
hereditary susceptibility in, 699-703
myocarditis due to, 761, 762
Q-T interval in, 460
and serum phospholipid, 944
and sickle cell anemia, 656, 657
- Rhythm**
gallop, in differential diagnosis, 922-923
nodal, due to quinidine sulfate, 146
- Ring**, vascular, and patent ductus arteriosus, 773
- Roentgenkymography**, of left atrium in mitral stenosis, 460
- Roentgenography**
in atrial rupture, 226-227
in isolated valvular pulmonic stenosis, 164, 169
in mitral insufficiency and stenosis, 209
- Royal Canadian Air Force**, electrocardiography in selection of aircrews for, 401-412
- RS-T segment**
depression of, in angina pectoris during therapy, 817
in one thousand young healthy aviators at ten year follow up, 396
- Rubella**, during pregnancy, fetal risks from, 135
- Rule**, Foster's, 458
- Rupture**
of aortic aneurysm, 466
in superior vena cava, 951
of aortic valve, 304
atrial, 221-229
of chordae tendinae, 577
of heart, with dissecting aneurysm, 469
ventricular, 221, 226
- R wave**
in isolated valvular pulmonary stenosis, 163, 169
standardization of, 569
after surgical correction
of coarctation of aorta, 873, 881
of patent ductus arteriosus, 877
of pulmonary stenosis, 863-864, 866
- Saline solution**
hypertonic
for edema in congestive heart failure, 629
for hyponatremia in congestive heart failure, 629
isotonic, diuresis after, in seated subjects, 147
- Salt load**, acute, and urinary sodium output, 912-918
- Saphenous vein**, primary varices of, 444
stripping of, 447-448
- Sarcoid**, Boeck's, and berylliosis, 131
- Scleroderma**, etiology of, 472
- Scherlis-Grishman system**, of vectorography, 101-113
- Sclerosis**, of aorta, due to dietary deficiency of lipotropic factors, 588
- Sedimentation rate**, in myocarditis, 754-755
- Septum**
atrial defect of
atrioseptopexy for, 307
closure, 617
congenital, 774
murmur in, 507
surgery for, 307, 788
defects of, 773
interatrial pressure gradient across, 527-534
interatrial defect of, 528-529
cyclic flow across, 531-532
production of, 946
repair of, 461, 946
interventricular defect of, and patent foramen ovale, 530
ventricular, intact, with pulmonic stenosis, 576
ventricular defect of, murmur in, 507
- Serotonin**
in tissue, 459
in urine, 459
- Serum**
albumin in
of professional blood donors, 98
and serum lipids, 94-99
bilirubin in, in thrombotic thrombocytopenic purpura, 48
cholesterol in
and adenosine 5-monophosphate, 25
and atherosclerosis, 744-745
and ballistocardiographic

Serum (Cont'd)

- characteristics of middle-aged men, 613
 - and diet, 20-21
 - gerontal, 474
 - in Italy, 606
 - vs. low density lipoprotein in familial hypercholesterolemia, 608
 - after plant sterol administration, 589
 - sitosterol in lowering of, 201-205
 - citric acid in, in atherosclerosis, 274
 - C-reactive protein in, in rheumatic fever, 635
 - fatty acid in
 - in atherosclerosis, 745
 - in obesity, 745
 - globulin in, 95
 - of professional blood donors, 98
 - lipid in
 - and angina pectoris, 588
 - in atherosclerotic males, 585
 - after dl-methionine, 788
 - and fat tolerance, 742-746
 - in normal males, 585
 - partition of, after heparin, 935
 - and protein fractions, 94-99
 - after sitosterol, 590
 - lipoprotein in
 - in atherosclerosis, 30-40
 - in coronary atherosclerosis, 621
 - in Italy, 606
 - after long-term estrogen administration in hypercholesterolemia, 587
 - after long-term heparin administration in hypercholesterolemia, 587
 - with pattern characteristic of biliary obstruction, 586
 - and plasma heparin, 604
 - postmortem studies in, 605
 - stability of, in atherosclerosis, 30-40
 - maternal, lipoprotein fractions in, 14
 - phosphatides in, 584
 - phospholipid in
 - in hyperlipemia, 745
 - and rheumatic fever, 944
 - polysaccharides in, in degenerative vascular disease, 791
 - from pregnant women in inactivation of antidiuretic hormone, 149
 - protein in, in atherosclerosis, 274
 - stability of, and arteriosclerosis, 792
 - umbilical cord lipoprotein fractions in, 14
- Serum sickness**, with acute pericarditis, 795
- Sex (of subject)**
- in atrial rupture, 227-228
 - and lipoprotein fractions 10-11
 - and myocarditis, 749
- Shock**
- cardiogenic, vasopressor drugs in, 84-92

- in chronic kidney disease, 124-125
 - hemorrhagic, intra-arterial transfusion for, 473
 - and myocardial infarction, 775
 - l-norepinephrine for, 303
 - in myocarditis, 754
 - due to obstruction of venous return to heart, 784
 - present-day concepts of, 472
 - surgical, Arterenol for, 949
 - due to tourniquet, effect of ferritin on mortality rates in, 470
- Shunt**
- right-to-left, 705-712
 - venoarterial, and interatrial communications, 705-712
- Sibling**, pulmonary artery fistula in, 636
- Sickle cell anemia**
- hemodynamic studies in, 654
 - and rheumatic fever, 656, 657
- Sinus bradycardia**, in one thousand young healthy aviators at ten year follow up, 386
- Sinus rhythm**, after surgical correction
- of coarctation of aorta, 872
 - of patent ductus arteriosus, 876
- Sinus tachycardia**
- in one thousand young healthy aviators at ten year follow up, 386
 - simulating auricular tachycardia, 923
- Sitosterol**
- absorbability of, 589
 - beta
 - and atherosclerosis, 25
 - in lowering of serum cholesterol, 201-205
 - and serum lipids, 590
- Skin**
- in manifestations of systemic diseases, 795
 - temperature of, after atropine sulphate injection, 414
- Smoking**
- ballistocardiogram after
 - in coronary artery disease, 139
 - of high school youth, 777
 - electrocardiogram after, 138
- Sodium**
- ACTH-induced retention of, 625
 - adrenal substance promoting retention of, 470
 - deficiency of, and edema, 431
 - excretion of, and blood pressure, 917
 - in myocardium, in experimental renal hypertension, 470
 - output of, and blood pressure, 536-542
 - radioactive clearance of, from muscle, 469
 - replacement of, in edema, 432-434
 - removal of, by ion exchange resins, 302
 - restriction of, in hypertension 141

- in skeletal muscle in experimental renal hypertension, 470
 - tubular reabsorption of, 430
 - urinary, after acute salt loads, 912-918
- Sodium chloride**
- and blood pressure during dietary stress, 784
 - dietary, chronic effects of, 296
 - excretion of, in heart failure, 674-678
 - toxicity due to, 616
- Sodium chromate**, radio-active, in red cell mass determination, 469
- Sodium Menadiol**, and Dipaxin-induced hypoprothrombinemia, 687
- Sodium morrhuate**, plasmin in lysis of thrombus due to, 948
- Sounds of Korotkoff**, 488, 489
- Splanchnicectomy**
- for hypertension, 144
 - urinary sodium output after acute salt loads before and after, 912-918
 - and venous congestion of limbs in hypertensives, 296
- Splanchnic nerve**, kidney function after hypertension due to stimulation of, 142
- Spasm**
- esophageal, pain due to, 921
 - of paravertebral muscle lldar for, 382
- Spatial angle**, between long axis of QRS loop and longitudinal axis of ventricles, 777
- Spleen**, enlarged, vascular murmur over, 304
- Squalene**, as cholesterol precursor 7, 8
- Standstill**. See Arrest
- Starvation**, and atherosclerosis, 25
- Stellate ganglion block**, value of, 474
- Stenosis**
- acquired, of pulmonary veins, 576
 - aortic, 926
 - calcific, 925
 - commissurotomy for, 465
 - arteriosclerotic, of major arteries, 467
 - mitral
 - with auricular fibrillation, and embolism, 520-521
 - commissurotomy for, 462
 - and cor pulmonale, 460
 - experimental, 793
 - left atrium in, 460
 - left auricular appendage in, 300
 - left auricular electrokymogram in, 209-210, 945
 - with mitral insufficiency, 207-211
 - murmur of, 925
 - phonocardiogram in, 210
 - pulmonary arterial pressure in, 147

- pulmonary function studies in before and after commissurotomy, 460
pulmonary vascular tree in, 807
simulated by myxoma of left atrium, 766-771
surgical treatment of, 636
tight, 943
transauricular valve fracture in, 623
pulmonary
congenital, 772
with intact ventricular septum, 576
with interatrial communication, 529-530
isolated, 576
open valvuloplasty for, 161-171
postvalvulotomy electrocardiograms in, 859-868
valvuloplasty using mechanical heart for by-pass of right heart, 636
- Sterol**
metabolism of, in atherogenesis, 6
plant
blood cholesterol level after administration of, 589
and cholesterol absorption, 25
and hypercholesterolemia, 610
lipoprotein pattern after administration of, 589
in lowering of serum cholesterol, 201-205
- S-T junction**, 569-570
in myocarditis, 759
- S-T segment**
in myocarditis, 759
standardization of, 569-570
after surgical correction of coarctation of aorta, 875, 882
after surgical correction of patent ductus arteriosus, 880
after valvulotomy in pulmonary stenosis, 864, 867
- Strain**, and cardiac disability, 953
- Strain gauge arch**, circulatory changes affecting measurement of heart force with, 145
- Streptococcus**, penicillin for prophylaxis in disease due to, 301
- Streptococcus liquefaciens**, bacteremia due to, case history, 56-57, 59-60
- Streptodornase**, 792
- Streptokinase**, 792
- Streptomycin**, 63
- Streptomycin**
for bacteremia, 62-63
Streptomycin, for enterococcal endocarditis, 63, 179, 188
with penicillin, 179, 184, 186-188, 190-191
- Stress**
atrial rupture associated with, 225-226
- capillary fragility, 298
dietary, effect of salt on blood pressure after, 784
emotional, and cardiovascular disease, 126
on heart, 667
- Strophant**
electrolyte excretion after, 787
plasma electrolytes after, 787
water excretion after, 787
- Succinic dehydrogenase**, in human aortic tissue, 607
localization of mercurial inhibition by, 940
- Succinylsulfathiazole**, 25
- Sulfur**, radioactive uptake by vascular tissue, 595
- Sulzer-Duchosa system**, of vectorcardiography, 101-113
- Superior vena cava syndrome**, 783
- Surgery**
anticoagulant therapy during, 213-219
Arterenol for shock due to, 949
for arteriosclerotic aneurysm of abdominal aorta, 788
for coarctation of aorta, 462
control of cardiovascular reflex during, 455
Dicumarol therapy during, 213-219
direct vision, of open heart during hypothermia, 464
of heart, 464
arrhythmia during, 789
for interauricular septal defect, 461
mitral, angiocardiology in, 635
orthopedic hexamethonium salts in, 943
thoracic, helpful guides in, 306
urinary sodium output after acute salt loads before and after, 912-918
- Svedberg unit**, 10
- S wave**
after surgical correction of patent ductus arteriosus, 877-878
after valvulotomy in pulmonary stenosis, 864, 866-867
standardization of, 569
- Sympathetic nervous system**
DMPP stimulation of ganglion of, 631
postural hypotension due to disease in, 363
- Sympathectomy**
for hypertension, 144, 780
in chronic kidney disease, 122
and sensitivity of blood vessels to epinephrine, 462
- Syncope**
after atropine sulphate, 415, 419, 426
after coughing, 469
differential diagnosis of, 924
- Synkavit**, and Dipaxin-induced hypoprothrombinemia, 687
- Syphilis**
aortitis due to, penicillin treatment of, 302
- cardiovascular, penicillin treatment of, 302
- Tachycardia**, 669
atropine-induced, 417
auricular
paroxysmal, 923
persistent, 233-235
and cardiac reserve, 670-671
in five thousand healthy adult males, 409-410
paroxysmal, 923
congenital, 786
with short P-R interval and abnormal QRS complexes, 282-291
sinus
in myocarditis, 752
in one thousand young healthy aviators at ten year follow up, 386
simulating auricular tachycardia, 923
supraventricular, persistent, 233-235
ventricular
diagnosis of, 924
in myocarditis, 756
ouabain-induced, 65-70
procaine amide for, 924
quinidine for, 924
- Taxis**, deflection of, in one thousand young healthy aviators at ten year follow up, 394-396
- Temperature**
extremes of, and hypertension, 781
oral, after atropine sulphate injection, 414
of skeletal muscle after ultrasonic irradiation, 297
of skin, after atropine sulphate injection, 414
- Terminal**, central, and dipole eccentricity, 559
- Test**, of blood prothrombin for control of Dicumarol therapy in myocardial infarction, 691-697
- Testosterone**, and atherosclerosis, 25
- Tetraethylammonium bromide**
for cardiac asthma, 628
for pulmonary edema, 628
- Tetraethylammonium chloride**
blood flow after, 889-891
blood pressure after, 887-889
reversal of depressor effect of, 893
tolerance to prolonged ganglionic blockade with, 887-894
- Tetralogy of Fallot**
anatomic variations in, 619
cyanosis in, 926
differential diagnosis of, 926, 927
with interatrial communication, 617
- Theophyllamine**, resorption of, 632
- Thiamine**, myocardial metabolism after deficiency of, 788
- Thiopental sodium**, laryngoscopy after anesthesia with, 295

- Thorax**, helpful guides in surgery of, 306
- Thrombin**, and platelets in acceleration of clotting, 934
- Thromboangiitis obliterans**
Dibenzylamine for, 368
Iliad for, 381
serum albumin in, 95-97, 99
serum globulin in, 95-97
- Thrombocytopenia**, and hemangioma in infants, 468
- Thromboembolic disease**, Dipaxin in, 687
- Thromboembolism**
after dehydration in cardiac decompensation, 936
and Dicumarol therapy during surgery, 213-219
recurrent, and pulmonary arteriosclerosis due to, 343-360
- Thrombosis**
intracardiac, in myocarditis, 754
intravascular
bio-electric etiology of, 292
trypsin for, 331-336
of left auricular appendage, 635
spontaneous, of right internal carotid artery, 950
venous, idiopathic, 578
- Thrombotic thrombocytopenic purpura**, 43-52
vs. disseminated lupus erythematosus, 46
- Thrombus**,
artificial, preformed, effect of intravenous trypsin on, 334
bland platelet, vs. primary vascular lesion as anatomic basis of thrombotic thrombocytopenic purpura, 43-52
mural, and bacterial endocarditis, 524-525
plasmin in lysis of, 948
- Thyroid**
in atherogenesis, 23-24
and rate of regression of atherosclerosis, 597
of hypercholesterolemia, 597
- Thyroxine**, aortic sclerosis due to, 609
- Tic**, of respiratory muscles, 940
- Tinnitus**, after cinchona alkaloids, 821
- Tissue**
electric potential of, in etiology of intravascular thrombosis, 292
normotensive, oxidative metabolism of, 296
permeability of, in experimental atherosclerosis, 598
serotonin in, 459
vascular, radiosulfur uptake by, 595
- Tobacco**, electrocardiogram after smoking of, 138
- Toe**, familial clubbing of, 634
- Tolerance**, to prolonged ganglionic blockade, 887-894
- Tourniquet**
leg
and cardiac output, 300
and kidney function, 300
- shock due to, effect of ferritin on mortality rates in, 470
- Toxemia of pregnancy**
cerebral hemodynamics in, 631
with hypertension
Apresoline in, 143
Arfonad in, 143
kidney hemodynamics in, 143
Protoveratrine in, 143, 144
spinal anesthesia in, 143
veratrum alkaloid in, 143, 144
and kidney circulation, 149
veratrum for, 454
- Toxicity**
of Apresoline, 941
due to chronic sodium chloride, 296
of cinchona alkaloid for angina pectoris, 817, 820-821
of digitalis, 931
of 1-hydrazinophthalazine, 941
of Neomycin, 59, 63
of quinidine, fever as sign of, 631
due to sodium chloride, 616
of trypsin, 332
- Toxin**, alpha, of Clostridium welchii in determination of stability of serum lipoprotein, 31-40
- Transfusion**
exchange, in hemolytic anemia with disseminated lupus erythematosus, 149
intra-arterial, 456
for hemorrhagic shock, 473
intravenous, for hemorrhagic shock, 473
- Trauma**
aortic aneurysm due to, 824-827
atrial rupture due to, 224
and coronary thrombosis, 938
- Trichinosis**, myocarditis due to, 751
- Tricuspid valve**
Ebstein's malformation of, 576
insufficiency of, 461, 923
- Tromexan**
vs. Dipaxin, 686, 687
prothrombopenic activity of, 688
- Trypsin**
intravenous, 331-336
electrocardiogram after, 334, 338-342
pulmonary embolism complicating therapy with, 950
- T sE-loop**, in left ventricular hypertrophy, 731-732
- Tuberculosis**
miliary, heart involvement in, 630
pulmonary, in congenital heart disease, 618
- Tubule**
potassium reabsorption by, 431
potassium secretion by, 432
sodium reabsorption by, 430
- Tumor**, of heart
in infancy, 787
primary, 787
rupture associated with, 225
of left atrium, 576
- Turbidity**, of serum, in determination of stability of serum lipoprotein, 31-40
- T vector**, spatial, repair variability of, 850-853
- T wave**
abnormality of, in five thousand healthy adult males, 403-406
in auricular fibrillation, 294
in auricular flutter, 294
as indicator of heart disorder, 402
inversion of
in ischemic phase of myocardial infarction, 829-841
postprandial, 843-849
in myocarditis, 758, 759
in myocardial infarction, 929
standardization of, 569-570
after surgical correction
of coarctation of aorta, 875, 882
of patent ductus arteriosus, 880
after valvulotomy in pulmonary stenosis, 864-865, 867
- T_p wave**, standardization of, 568
- Ulcer**
due to impaired venous circulation, Dibenzylamine for, 370, 371
peptic, and arteriosclerosis, 468
- Umbilical cord**, lipoprotein fractions in serum in, 14
- Urethra**, bleeding from, in malignant hypertension, 627
- Urine**
citrate in, during potassium deficiency, 472
serotonin in, 459
sodium in, and blood pressure, 536-542
specific gravity of, in congestive heart failure, 125
- Urobilinogen**, in thrombotic thrombocytopenic purpura, 48
- Urticaria**, after cinchona alkaloids, 821
- Vagal cardiovascular reflex**, control of during surgery, 455
- Vagotomy**, cervicothoracic, cardiovascular effects of, 463-464
- Valsalva maneuver**
planigraphy in, 461
venous blood flow during, 146
- Valve**
aortic. *See* Aortic valve
mitral. *See* Mitral valve
pulmonary. *See* Pulmonary valve
tricuspid. *See* Tricuspid valve
venous, 442-443, 444
- Valvuloplasty**
mitral, atrial electrokymogram after, 77
open, for isolated valvular pulmonic stenosis, 161-171
pulmonary, using mechanical heart for by-pass of right heart, 636
- Valvulotomy**
electrocardiogram after, in pulmonary stenosis, 859-868

- mitral
anesthesia in management of, 463
and lobectomy, 789
- Varicose veins**, 442-449
- Varix**, esophageal, due to malformation of portal venous system, 936
- Vascular disease**
degenerative, serum polysaccharides in, 791
diabetic, high vegetable-fat diet in, 693
hypertensive
serum albumin in, 95-97
serum globulin in, 95-97
peripheral
and clearance of radioactive sodium from muscle, 469
dioxiline phosphate in, 455
- Vascular system**
collapse of, after subcutaneous hypertonic nonelectrolyte solution, 940
lesions of
due to deficient diets, 602
and sodium chloride toxicity, 616
peripheral, in regulation of blood flow, 665
pooling in, atropine-induced, 423-428
- Vascular tree**, pulmonary, pathology of, 801-807
- Vasodepressor material**, 514
- Vasodilatation**, due to atropine, 419
- Vasodilator**
cinchona alkaloids as, 819
coronary, clinical effectiveness of, 303
Ildar as, 374-383
postulated, in medulla oblongata, 954
- Vasoexcitator material**, 514
- Vasopressin**, cardiovascular effects of, 941
- Vasopressor**, in cardiogenic shock, 84-92
- Vasospasm**, in extremities, Ildar for, 382
- Vector**
manifest, and dipole eccentricity, 553-554
spatial, repeat variability of, 850-853
- Vectorcardiogram**
postprandial changes in, 846-847
spatial, in left ventricular hypertrophy, 728-734
- Vectorcardiograph**, standardization of, 570
- Vectorcardiography**
nomenclature, standardization of, 572
selection of views, standardization of, 572
spatial
direct experimental study, 101-112
Duchosal-Sulzer system of, 101-113
Grishman-Scherlis system of, 101-113
Wilson tetrahedron system, 101-113
spatial angle between long axis of QRS loop and longitudinal axis of ventricles, 777
standardization of leads in, 564
technics standardization of, 570-572
- Vegetable oil**, dietary, and atherosclerosis in rat, 592
- Vein**
blood flow in, 443-444
during Valsalva maneuver, 146
filling time of, 444, 446
insufficiency of, in lower extremity, 465
of limb, congestion of, in hypertensives before and after splanchicectomy, 296
of lung
in calcific aortic stenosis, 806
in chronic left ventricular failure, 805
definition of, 802
in mitral stenosis, 807
normal, 806
in systemic hypertension, 806
of neck, in differential diagnosis, 923
pulmonary
aberrant, 618
acquired stenosis of, 576
stripping of, for primary varices, 447-448
valve in, 444
varicose, 442-449
- Vena cava**
inferior
induced congestion of, 299
occlusion of, and edema formation, 675-677
superior
induced congestion of, 299
rupture of aortic aneurysm into, 951
- Venesection**
for hypertension in acute glomerulonephritis, 118
for lung edema in acute glomerulonephritis, 117
- Venous pressure**, and edema formation, 676-677
- Venous system**, portal, esophageal varices due to malformation of, 936
- Ventricle**
arrhythmia of, neurogenic, 458
systole of, multiple episodes of, 306
and cardiac output, 665
contractility of, and carotid pressure, 736-740
depolarization potentials in, 137
duration of isometric contraction of, 777
fibrillation of
in hypothermic dog, 721-726
and potassium, 721-722, 723-726
prostagline inhibition of, 721-726
function curves of, after Aramine, 87, 89
infarction of, 223
interventricular defect of, and patent foramen ovale, 530
left
ejection period of, and Q-T interval, 624
electrokymogram of, in myocardial infarction, 138
hypertrophy of, 929
lung changes due to failure of, 801-807
after myocardial infarction, 138
spatial vectorecardiogram in hypertrophy of, 728-734
subendocardial ischemia of, and coronary insufficiency, 293
work of, in sickle cell anemia 656, 659
in mitral insufficiency and stenosis, 209
right
failure of, in recurrent thromboembolism, 355
hypertrophy of, 929
pressure in, before and after valvuloplasty for isolated valvular pulmonic stenosis, 164-166, 170
rupture of, 221, 226
septal defect of, murmur in, 507
septum of, intact, with pulmonary stenosis, 576
spread of electrical activity through wall of, 294
staircase contracture of, 305
tachycardia of
diagnosis of, 924
ouabain-induced, 65-70
procaine amide for, 924
quinidine for, 924
- Ventricular gradient**, in myocardial infarction, 622
- Ventriculotomy**, for ventricular fibrillation, 723
- Veriloid**
carotid pressoreceptor response to, 454
for hypertensive phase of acute nephritis, 144
intramuscular, as hypotensive agent, 633
- Veratrum**
alkaloid of
for hypertension in acute glomerulonephritis, 118
and kidney hemodynamics in pregnancy with toxemia and hypertension, 143
derivative of, for hypertensive phase of acute nephritis, 144
for toxemia of pregnancy, 454
- Veratrum viride**, and cerebral hemodynamics in toxemia of pregnancy, 631
- Virus**
encephalomyocarditis, 751
myocarditis due to, 578, 751
- Vitamin K₁**, and Dipaxin-induced hypoprothrombinemia, 687
- Vomiting**, after ouabain, 66
- Von Gierke's disease**, 927

Water

diuresis, and spontaneous anti-diuresis, 470

excretion of

in heart failure, 674-678

after hexamethonium for hypertension, 297

during induced congestion of vena cava, 299

after neohydrin, 634

after strophanthin, 787

in myocardium in experimental renal hypertension, 470

replacement of, in cardiovascular-renal disease, 437-438

retention of, Pitressin-induced excretion of urinary elec-

trolyte as function of, 147

in skeletal muscle in experimental renal hypertension, 470

Wilson tetrahedron system, of vectorcardiography, 101-113

Wolff-Parkinson-White syndrome, 282-291, 776

electrokymography in, 624

in five thousand healthy adult males, 406

as indicator of heart disorder, 402

in one thousand young healthy aviators at ten year follow up, 387, 389-390

procaine amide for, 634

Work, respiratory, in emphysema, 794

Wound, due to gunshot, of aorta, 463

Wrapping, for aortic aneurysm, 948

Xanthelasma, in atherosclerosis, 790

Xanthoma, in atherosclerosis, 790

Xanthomatosis, primary essential

serum albumin in, 95-97, 99

serum globulin in, 95-97, 99

Zuckerkindl, organs of, 295

